







THE SOUL

OR

RATIONAL PSYCHOLOGY

EMANUEL SWEDENBORG

TRANSLATED AND EDITED BY

FRANK SEWALL, A.M.

From the Latin edition of Dr. J. F. Immanuel Tafel, Tubingen, 1849



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EMAN. SWEDENBORGII

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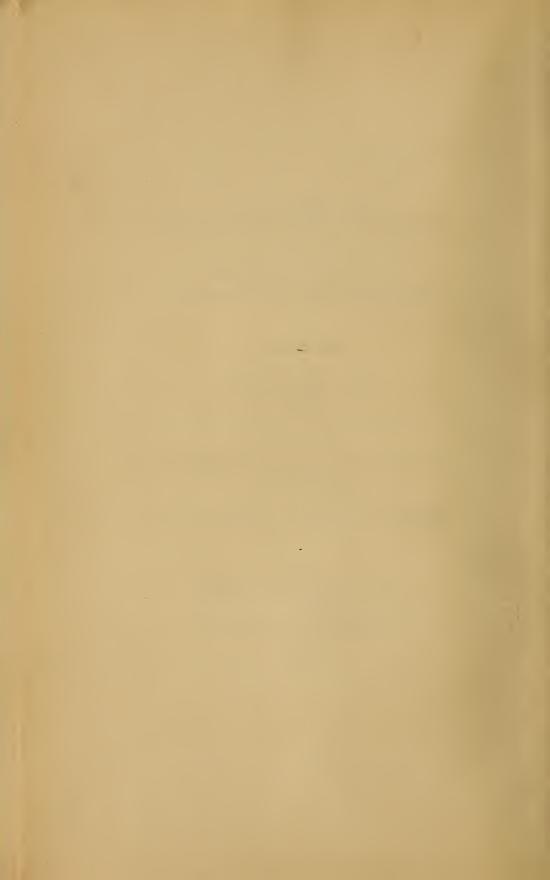
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TRANSLATOR'S PREFACE.

From the author's statement in his preface to the treatise on the Soul, as well as from the tenor of his scientific and philosophical writings throughout, it is unmistakably clear that the search for the soul was the real end and inspiring motive of all his labours.

The ardour with which he sought this precious knowledge is evinced by the frequent tentative and preliminary essays scattered through his writings, in which he records his fragmentary glimpses of his subject, and pursues as it were the fleeting vision of a sublime

figure forever eluding his grasp.

Thus in his prologue to the work entitled *The Animal Kingdom*, the author publishes a "Summary of his intended work;" in the course of which, after a series of anatomical studies, is placed an Introduction to Rational Psychology, "consisting of new doctrines through the assistance of which," he remarks, "we may be conducted from the material organism of the body to a knowledge of the soul which is immaterial; these are, the doctrine of Forms, the doctrine of Order and Degrees, also, the doctrine of Series and Society, the doctrine of Influx, the doctrine of Correspondence and Representation, lastly, the doctrine of Modification."

This Introduction to Rational Psychology the author had actually furnished already in the First Part (chapter viii.) of the *Economy of the Animal Kingdom*, published some years previously. In the projected Summary the Introduction was to be followed immediately by the Rational Psychology itself, which should comprise "the subjects of Action, of External and Internal Sense, of Imagination and Memory; also of the Affections of the Animus, of the Intellect, that is, of the Thought and of the Will, and of the Affections of the Rational Mind, also of Instinct; lastly of the Soul, and of its State in the Body, its Intercourse, Affections, and Immortality, and of its State when the Body dies. The work to conclude with a Concordance of Systems."

In the series as published, however, we find the Introduction to Rational Psychology actually followed by the chapters i. and ii. of the Second Part of the Economy, treating of the Motion of the Brain and of its Cortical Substance, and these are again as abruptly succeeded by a chapter on the Human Soul, in beginning which the author refers to his previous endeavour "to expound a doctrine of Series and Degrees, by way of introduction to a knowledge of the

soul." "I could not but think," he says, "with mankind in general, that all our knowledge of it [the soul] was to be attempted by a bare reasoning philosophy, or more immediately by the anatomy of the human body. But upon making the attempt, I found myself as far from my object as ever, for no sooner did I seem to have mastered the subject, than I found it again eluding my grasp, though it never absolutely disappeared from my view. Thus my hopes were not

destroyed, but deferred."

Speaking of the doctrine of Series and Degrees as only teaching "the distinction and relation between things superior and inferior, or prior and posterior," and as unable "to express by any adequate terms of its own those things which transcend the sphere of familiar things," he declares the necessity of our having recourse to a Mathematical Philosophy of Universals, a kind of universal science to which all other sciences and arts are subject, and one which "advances through their innermost mysteries, as it proceeds from its own principle to causes and from causes to effects, by its own, that is by the natural, order." "But even if it were granted," he continues, "that the doctrine of Order and the science of Universals were carried by the human mind to the acme of perfection, nevertheless it does not follow that we should, by these means alone, be brought into a knowledge of all that can be known; for these sciences are but subsidiary, serving only by a compendious method and mathematical certainty to lead us, by continued abstractions and elevations of thought, from the posterior to the prior sphere; or from the world of effects, which is the visible, to the world of causes and principles, which is the invisible. Hence in order that these sciences may be available we must have recourse to experiments and to the phenomena of the senses, without which they would remain in a state of bare theory and bare capability of aiding us. For these reasons I am strongly persuaded that the essence and nature of the soul, its influx into the body, and the reciprocal action of the body, can never come to demonstration, without these doctrines [of Series, Orders and Universals], combined with a knowledge of anatomy, pathology, and psychology; nay, even of physics, and especially of the auras of the world; and that unless our labours take this direction and mount from phenomena, thus we shall in every new age have to build new systems, which in their turn will tumble to the ground, without the possibility of being rebuilt. This and no other, is the reason that with diligent study and intense application I have investigated the anatomy of the body, and principally the human, so far as it is known from experience; and that I have followed the anatomy of all its parts in the same manner as I have here investigated the cortical substance. In doing this I may have gone beyond the ordinary limits of inquiry, so that but few of my readers may be able distinctly to understand me. But thus far I have felt bound to venture, for I have resolved, cost what it may, to trace out the nature of the human soul. He

therefore who desires the end, ought also to desire the means." He then proceeds to arrange into chapters what he calls "The first fruits of my psychological labours."*

The reverence and cautious modesty which everywhere tempers the ardour of the author in the quest of his sublime object are apparent in the mention which, only four years later, in the work on the *Animal Kingdom*, he makes of this same "Prodromus on the Human Soul." Thus he writes:—

"Not very long since I published the *Economy of the Animal Kingdom*, a work divided into distinct treatises, but treating only of the blood, the arteries, and the heart, and of the motion of the brain and the cortical substance thereof; and before traversing the whole field in detail I made a rapid passage to the soul and put forth a prodromus respecting it. But on considering the matter more deeply, I found that I had directed my course thither both too hastily and too fast,—after having explored the blood only and its peculiar organs. I took the step, impelled by an ardent desire for knowledge. But as the soul acts in the supreme and innermost things, and does not come forth until all her swathings have been successively unfolded, I am therefore determined to allow myself no respite, until I have traversed the universal animal kingdom, to the soul. Thus I hope that by bending my course inward continually, I shall open all the doors that lead to her, and at length contemplate the soul herself, by the Divine permission" (Prologue to the *Animal Kingdom*, no. 19).

Accordingly, in the work on the Animal Kingdom, the author proceeds to examine in detail the various parts of the human body. omitting those which had been treated of already in the Economy, etc., namely, the heart, the vessels, and the blood (Prologue to Part III., An. King., no. 469). Part I. treats of the Organs of Taste and of Digestion, of the Glands, the Gall-bladder, the Kidneys, etc. Part II. treats of the Viscera of the Thorax, or the Organs of the Superior region. Part III., of the Skin, the Senses of Touch and Taste, and Organic Forms generally. It is noticeable that the brain is neither mentioned by the author as having been already "fully treated of" in the Economy, nor included in the three parts of the Animal Kingdom, as translated and published in the volumes bearing that name. The treatises on the brain which fill so conspicuous a place in the projected Summary of the author's labours above mentioned, were designed by the author to constitute the succeeding division, or Part IV. of the work on the Animal Kingdom, as appears from his assertion at the close of no. 468, in the Prologue to Part III. of the same work. The extensive manuscripts left by the author covering this great division of his work have been in minor portions brought to light through the translations of Dr. J. J. G. Wilkinson,

^{*} The Twelve Theses, or Statement of Principles, contained in this important chapter, or Prodromus on *The Human Soul*, we have thought it desirable to present to the reader in the form of an appendix to the present work, omitting the elaborate exposition and demonstration which follows each number (see Appendix I.). [Tr.

and are now in process of being translated and published entire under the editorship of Dr. Rudolph L. Tafel.*

At the close of the Prologue here referred to the author once again intimates his intention "to ascend by degrees to the supreme sphere from whence we may legitimately deduce the principles of things, and where we may speak of the soul with comparative certainty and definiteness," in order that from the higher knowledge thus attained he may more intelligently treat of a subject which, according to his original plan of the work, would here have its place. namely, that of generation and "the organs by means of which new forms are conceived in the image of the form preceding them." This intention he carried out in treating of The Brain, in whose cortical or cineritious substance "the soul resides as in its principles" (An. King., no. 468), and also in those treatises edited by Dr. Immanuel Tafel, Tubingen, 1848, in the Latin, entitled also, "Part IV. of the Animal Kingdom, which treats of the Carotids, of the Senses of Smell, Hearing, and Sight, of Sensation and Affection in General, and of the Intellect and its Operation." An abstract of these treatises, hitherto untranslated, particularly of the author's Epilogue on the Senses, or Sensation in general, of his General Exposition concerning Sensation and Affection, of his Rules of Harmony and Music, and his Conclusion concerning the Intellect and its Operation, we have added to the present work, forming Appendix II.

Descending now, as he had promised, from these first principles again into the body, the author discusses in succeeding parts of the Animal Kingdom, the Periosteum and the Mammae (De Periosteo et de Mammis; Tafel, Tubingae, 1849), and Generation and its Organs (De Generatione, de Partibus Genitalibus utriusque sexus, et de Formatione Foetus in Utero; ed. Tafel, Tubingae, 1849. Translated by Wilkinson, London, 1852); and at length, having surveyed the entire field of the human anatomy and physiology, he reaches in the treatise now offered to the reader, the long anticipated Rational Psyshology itself, which, according to his plan drawn up in the Prologue to the Animal Kingdom, should conclude the whole series of treatises, and should "comprise the subjects of Action, of External and Internal Sense, of Imagination and Memory; also of the Affections of the Animus; of the Intellect, that is, of Thought, and of the Will, and of the Affections of the Rational Mind; also of Instinct; lastly of the Soul, and of its State in the Body, its Intercourse, Affection and Immortality; and of its State when the Body dies. All the subjects here named are treated under their proper heads in the work now before us, with the exception of Action. special treatise on this subject, together with other brief papers, was published both in Latin and in an English translation, in

^{*} The Brain; considered Anatomically, Physiologically, and Philosophically, by Emanuel Swedenborg: edited, translated and annotated by R. L. Tafel, A.M., Ph.D.; in four volumes. James Speirs, 36 Bloomsbury Street, London.

London, 1847, by Dr. J. J. G. Wilkinson, under the title of Posthumous Tracts. Besides the treatise on Action, and another on Sensation, or the Passion of the Body, this volume contains three brief transactions, all pertaining immediately to the subject before us, but evidently written at intervals, and at a time previous to the date of the present work. These three are, a brief essay entitled The Way to a knowledge of the Soul, a paper in four chapters on The Origin and Propagation of the Soul, and a treatise of considerable length called a Fragment on the Soul.

Even as early as 1734, in the work entitled Outlines on the Infinite, which immediately succeeded the Principia, the author devotes the second part of the treatise to a Philosophical Argument on the Mechanism of the Intercourse between the Soul and the Body.*

Finally, among these preliminary glances at the great subject aimed at should be here mentioned two chapters on *The Soul*, and the *Chain and Bond of Uses*, the latter treating of the cerebrum as the medium of intercourse between the soul and the body. These are found in Codex 58 of the Manuscripts (*Photolithographed MSS.*, vol. vi., pp. 81–92), and inserted by Dr. Rudolph L. Tafel in vol. i. of the above-mentioned work on *The Brain* (see page 13).

An explanation of these frequent and scattered unfinished essays on the soul, is afforded in the author's address to the reader with which he introduces the above mentioned *Fragment on the Soul*. He says:—

"I was for some time in doubt whether to comprise in a single volume all my long meditations on the soul and the body, and their reciprocal action and passion, or whether it would be better to divide the work into numbers, and publish it seriatim, after the manner of transactions. To declare the nature of the soul, to exhibit its state, to show the mutual intercourse and actions subsisting between it and the body, and the connection of each with each in the bonds of harmony; in other words, to display philosophically, analytically, geometrically and anatomically, the entire animal kingdom and its parts, with the functions and offices of each. This is a labour of some years, and must extend over several volumes..... I have thought it most prudent to divide the labour, and to take up my pen at short intervals, allowing myself occasionally a little respite, to draw breath and enable me to attend to my other duties. For the mind is even as the pen; too much usage blunts its point and wears away its fineness. Such, gentle reader, is the reason which will move me to recur at frequent intervals to the task I have prescribed for myself, and to intrude myself often upon your presence, probably not less than five or six times a year with my publications, or as they may properly be called Psychological Transactions. By this means I hope, after a few years, to gain the end, and to be in a condition to declare the state of the soul when its connection with the body is dissolved by death, and it is left to its own disposal."

That the work now before us, *De Anima*, is the author's long deferred *Rational Psychology*, and the final summary of all his studies

^{*} Outlines of a Philosophical Argument on the Infinite, etc., by Emanuel Swedenborg. Translated from the Latin by James John Garth Wilkinson; London, 1847.

on this subject, forming also the conclusion and culmination of the great series entitled the Animal Kingdom, seems abundantly apparent from the agreement of its contents with those subjects indicated in the closing numbers of the author's projected scheme of his work, from the almost universal reference in the minor treatises to a fuller and final one to come, and from the distinct statement in the author's preface to this work, that it is only after completing his survey of the human anatomy that he now feels himself enabled to really advance and penetrate into the hitherto hidden knowledge of the soul itself. He refers to his preliminary studies, including the Introduction to a Rational Psychology, as having been finished; and "so now, at length," he writes, "we may treat of the soul from principles, or synthetically." And finally, whereas he has hitherto warned his reader and himself from daring prematurely to enter the sacred precincts of this supreme knowledge, he now boldly invites to enter; believing that his reader, if he shall have deigned to follow him thus far, "will perceive what is the soul, what is its state in the body, and what after the life of the body."

That a work forming the culmination and conclusion of the whole series of scientific and philosophic works of Swedenborg should have lain hidden away in manuscript one hundred years before being prought to light, as it then was in the Latin edition of Dr. J. F. Immanuel Tafel, seems remarkable; and hardly less so that nearly half a century has passed before an English translation has been furnished. The transcendent importance of the work, if we may judge from the relative estimate placed upon its subject-matter by the author himself, or from the diligence and ardour with which he prosecuted the laborious studies necessary to its production, appears plainly enough from what we have here adduced.

We desire to add a few reflections on its value as viewed in the light of the relations this work sustains to the history of philosophy in general, and also in particular to the subsequent or theological

portion of the author's writings.

The one desire and aim animating the entire series of Swedenborg's scientific and philosophical writings was, as we have at the outset remarked, his "search for the soul." This single aim furnishes us the key to Swedenborg's mission in the world of science,

of philosophy, and of theology.

To know the nature of spirit and its relation to matter, or, as the author so frequently puts it, "a knowledge of the soul and of its intercourse with the body," was the twofold object of his search. If we regard the body in the sense of the larger body—the natural world,—and the soul as meaning the larger soul—the spiritual world,—the knowledge of the soul and its intercourse with the body becomes identical with that of the spiritual world and its relation to the natural world, and this is pre-eminently the subject of the descriptive portion of our author's theological writings.

Where did he seek this knowledge of the soul?

In its own realm. In the living (and not in the dead) human body; in the kingdom of uses, as exhibited in the beautiful order, harmony, and activities of the human anatomy and physiology.

The "Animal Kingdom" meant to Swedenborg the kingdom of

the anima, the realm over which the soul presides as queen.

The relation of this soul to her body, or her own kingdom and world, was what he first sought to know; and through that to know the nature of the soul herself. The knowledge he obtained in these labours, while not all that he aimed at, was nevertheless that which peculiarly and pre-eminently qualified his mind to be the recipient of the greater knowledge of the true nature of spirit and of the relation of the spiritual to the natural world.

The doctrine of Correspondence as a science was naturally, and not supernaturally, revealed to Swedenborg. It was a deduction of his own reasoning, or a part of his own philosophy, as was the doctrine of Order, Series, Degrees, and Modification, on which it rests. This is unmistakably apparent from his own statement,* and from the repeated applications of and references to these doc-

trines in his scientific writings.

The doctrine of Correspondence became manifest to Swedenborg in his search for the mode of the soul's intercourse with the body. It was here, in the human soul's own province, that our author found the key which was to solve the problem of the ages, and open the minds of men to a truly heavenly knowledge of the relation of the spiritual to the natural world, of spirit to matter, of earth to heaven, of the written Word to eternal and essential truth, and of man to God.

To Swedenborg Correspondence meant, in its first sense, the correspondence of the body to its physical environment, and then that of the soul within to its corporeal, that is, its fibrous and sensuous environment.

The history of this doctrine of Correspondence carries us back to the origins of philosophy among the Greeks, and especially brings into prominence the relation of Swedenborg and Aristotle. The historic antecedents of the doctrine of Influx, or the Intercourse of the Soul and Body, Swedenborg himself has outlined in several of his theological works, but especially in his brief but wonderful treatise *De Commercio Animae et Corporis* (On the Intercourse of the Soul and the Body).

Swedenborg, as no other writer, deserves the proud title of the Aristotle of modern philosophy. For as Aristotle, with his inductive and scientific method, succeeded to the idealism of Plato, so after the speculative and ideal systems of Descartes in France, and Leibnitz and Wolf in Germany, came Swedenborg with his severely practical

^{*} See in the present work, chap. xii.; also Economy of the Animal Kingdom, chap. viii.

method, his reasoning from experience, climbing by the ladder of knowledge a posteriori up to the higher and interior principles, from which again he might descend into a true philosophy of nature and of man. The coincidence of the researches of Aristotle and Swedenborg on the subject of the soul cannot but strike the attention of the historian; not indeed so much in the resemblance of their contents, although this is in instances remarkable, as in the similarity of method, or their ways of approaching the remotely-hidden object of their quest. Both used the experimental method, and this led them into very similar paths of investigation. As evidence of this, notice the contents of that series of Aristotle's writings in which his work On the Soul ($\pi \varepsilon \rho i \psi \nu \chi \tilde{\eta} \varsigma$) occurs. They are as follows: four books on the Parts of Animals; five books on the Generation of Animals; to which are added treatises on the Walking of Animals. on the Motion of Animals, and on the Spirit. Three books on the Soul; to which are added treatises on Sense and the Sensitive; on Memory; on Sleep and Dreams; on Length and Shortness of Life; on Youth and Old Age; on Life and Death; and on Respiration. That our reader may compare at a glance the methods of discussion as well as the thoughts advanced by these two great inductive psychologists, the leaders of ancient and of modern learning respectively, I have thought it admissible to introduce as an appendix to the present work a series of extracts made at random from Taylor's translation of Aristotle's De Anima, etc. (see Appendix III.).

Great, however, as was Swedenborg's admiration for his illustrious master and predecessor in the line of inductive research, so that to him was assigned the highest place among the world's great teachers, as evinced by the titles, the "Chief Philosopher of the Gentiles," and "Our Philosopher," so often and so endearingly bestowed in alluding to him,* yet was Swedenborg no blind follower of even so revered a teacher, nor did he hesitate to differ from him on the important question of the manner of the intercourse of the body and the soul

Three doctrines had hitherto prevailed in the learned world regarding the intercourse of mind and matter. The first, called by Swedenborg that of Physical Influx, was taught by Aristotle, and afterwards during all the earlier period of Christian learning by the Schoolmen. After this came the doctrine of Spiritual or Occasional Influx, as taught by Descartes and his disciples. At last came Leibnitz with his, as he believed only reconciling, doctrine of Pre-established Harmony.† Swedenborg, agreeing wholly with neither, sought to reconcile the three by extracting and combining the gist of truth in each, and the resultant doctrine he named the doctrine of Correspondence, a doctrine which rests upon the equally philosophic

^{*} Econ. An. King., vol. ii. pp. 240, 241, 247.

[†] For a statement of these doctrines see note to no. 167 (p. 104) of the present work.

and scientific doctrines of Series, Orders, Degrees, and Modifications. Correspondence, as seen in the plane of nature only, (and it was only on this plane that Swedenborg up to this time had discovered it.) consists in such a mutual adaptation of inner and outer, higher and lower, grosser and more subtle spheres or bodies, that there may be a reception, communication, and transference of motions and affections from one to the other. It is therefore the name we give to that kind of intercourse which is not bodily influx, or to the union that exists, not by continuity or confusion of substance, but by contiguity and modification of state. It is the relation of the affluent waves of ether to the eye; of the eye to the sensory fibre, of the fibre to the cortical gland; of the gland to the common sensory; of the sensory to the imagination; of the imagination to the intellect: of the intellect to the soul: of the soul to God. By correspondence the outer affects the inner without becoming one with it; by correspondence things totally different in degree and in substance are nevertheless so adapted that motions or tremulous vibrations in one may be continued through the other, or converted into some modification of the other's state. So the soul corresponds in general and in every particular to its body.

This doctrine of Correspondence, thus learned by Swedenborg from the human body and its relation to the soul, was afterward applied by him to all things material and spiritual, and thus to the

natural and spiritual world.*

Does it therefore follow that what Swedenborg has delivered in his theological writings as Divinely revealed, is after all reducible to a purely natural and scientific knowledge? Swedenborg laid no claims, indeed, to any supernatural illumination while elaborating these doctrines of Correspondence, of Degrees, of Series, etc., in his scientific works, and yet on these doctrines rests logically the whole scheme of the spiritual metaphysics embraced in his theological works. The answer to this question is a matter of grave importance; involving as it does the whole subject of the nature of that illumination to which Swedenborg lays claim, and the relation of his philosophical to his theological or illuminated writings.

A brief answer, we think, may be formulated thus:—It is not the knowledge of Correspondence that is revealed or supernaturally

discovered, but the knowledge of the things that correspond.

Like the science of arithmetic, of algebra, and of logic, so the science of Correspondence is a product of the human reasoning power. Indeed, Correspondence may truly be called the logic itself of the universe, or of creation. But as bare logic or bare mathematics it would be utterly barren of results were there not the field of

^{*} We have here given the doctrine of Correspondence only as exhibited in nature, or to natural observation. For an adequate statement of the doctrine in its real significance and its universal application, the reader should refer to the Author's works on the Divine Love and Wisdom, the Doctrine of Sacred Scripture, etc.

experimental knowledge to which to apply it. This experimental knowledge is afforded in two planes of experience—the physical and the spiritual. The spiritual experience, or that knowledge derived from things heard and seen in the spiritual world, was granted to Swedenborg by Divine permission, and afforded the true, the loftiest, the final field for the application of those great sciences elaborated by the long years of such arduous discipline in the schools of nature. No one is more emphatic and clear than Swedenborg himself in defining this difference between a doctrine as a method, and the substantial knowledge to which that doctrine is applied.* Nor need we wonder if, when these doctrines as scientific formulæ were later rendered substantial living knowledges, being clothed upon by the great facts of a spiritual world and the human life of its inhabitants, all former knowledge, even of the doctrines themselves as illustrated in mere nature alone, seemed to Swedenborg as naught, or as empty shadows. The senses whose phenomena were to be the field of exploration for the doctrine of Correspondence and Discrete Degrees were the senses of the spiritual body. By this experience the nature of the soul was substantially learned in the spiritual world, but never by Swedenborg in this natural world, or by the deductions of reason alone. And the soul in its true nature being there, and for the first time, seen and known, the mode of intercourse between the soul-world and the matter-world is detected at a glance by means of this already acquired knowledge of Influx, of Degrees and of Correspondence.

What, then, is the real gain achieved in the present work? That even after all his laborious ascent he has failed to attain to any satisfactory knowledge of the essence of the soul itself, and that what is advanced is but conjecture and guesses of the reason is virtually confessed by the author in the remarkable utterance in no. 524 of the present work:—" Sed haec in secretis sunt; non nisi quam conjecturae sunt; quis haec vidit, ratio haec solum suadet. Quando animae vivimus, nos ipsos fortassis ridebimus, quod tam infantiliter divinaverimus." But while the substance of the soul still remains a secret, its mode of intercourse with the body, particularly in the outer degrees of its life, as well as its actual manifestations in the conscious acts of the imagination, the intellect, and the will, are here presented with a fulness and a clearness unsurpassed, if ever approached, by the psychological writers of any age. The physiological basis of psychology is here presented with the exactness of mathematical demonstration. The subjects of Innate Ideas, of Instinct, of Freedom of the Will, of the Higher and Lower Minds, are here elucidated in an argument at once so logical and beautiful as to make the study of these difficult themes a delight.

But even these features are of subordinate value when compared

^{*} See above (page viii.), the quotations from the *Economy*, beginning with the words, "But even if it were granted," etc.

with the great chief gain here accomplished in, namely, the author's clear apprehension of the doctrine of Correspondence, with its related doctrines of Series, Degrees, of Orders, of Uses, and of Society. In these grand logical structures we find laid the foundations of a truly spiritual science, or of that theology which makes the knowledge of God a positive knowledge; and this not by materializing the Divine, but by illuminating the material and the natural with a celestial light and actuating these with a Divine immanence.

While contending that it is the knowledge of the things which correspond that is supernatural in Swedenborg's disclosures, and not the science of Correspondence itself, we feel that even here it will be worth our while to distinguish a little more carefully than has hitherto been the habit of the readers of Swedenborg, between revelation in its highest sense, as afforded in the opening of the spiritual senses of the Word, and those knowledges of the spiritual world "from things heard and seen," which while truly supernatural cannot in the *same* sense be called revealed.

It has been customary to allude alike to the author's relations of "things heard and seen" by him in the spiritual world, and to his exposition of the internal sense of the Scriptures as matter of revelation. But between the two classes of truths there is, according to the author himself, a marked distinction. Strictly speaking, it is only those doctrines which, as the author declares, he received "not from any angel but from the Lord alone while reading the Word," that is to be called revelation. It is here that truth is taught synthetically and a priori in the fullest and sublimest sense. The knowledges, on the other hand, which the author imparts in his narration of his own experience by virtue of his conscious intromission into the spiritual world and of the things there "heard and seen;" these, while in a true sense supernatural knowledges, are nevertheless knowledges gained by a purely experimental method, and therefore as strictly inductive and analytic as the knowledges acquired in the pursuit of any branch of natural science. It is this fact which distinguishes the theology of Swedenborg from all previous theological writing, in giving it not only a strictly scientific form, but a positive content, absolutely free from speculative elements.

This twofold character of his writing is indicated in the titles of his various works; thus that of the Arcana reads as follows: "Arcana Coelestia quae in Scripturae Sacra seu Verbo Domini sunt, detecta; hic primum quae in Genesi. Una cum Mirabilibus quae visa sunt in Mundo Spirituum et in Coelo Angelorum." The interior truths of the Word are uncovered (detecta); the things of the spiritual world are seen (visa). In the same way the exposition of the Book of Revelation in the New Testament is called the Apocalypse Revealed: Apocalypsis Revelata, in qua deteguntur Arcana quae ibi praedicta sunt et hactenus recondita latuerunt." Here again are mysteries "uncovered" in the fullest sense of revelation, and these uncov-

ered things of the Word are the primary source of that doctrine which the writer gave to the churches as verily "descending from God out of heaven." Therefore again in his tract entitled the "New Jerusalem and its Heavenly Doctrine, from things heard from heaven (ex auditis e Caelo)," he gives in the introduction this explanation regarding the doctrine to follow:—"This also is from heaven, being from the spiritual sense of the Word, which is the same with the doctrine that is in heaven" (no. 7). And in the "Brief Exposition of the Doctrine of the New Church, signified by the 'New Jerusalem' in the Revelations," in the opening paragraph he says, "The Apocalypse having been revealed," he is prepared to lay before the world "a complete view of the doctrine" of the Lord's new church.

In calling attention to this distinction in the contents of Swedenborg's spiritual writing, it is not our intention to detract in the least from the validity of one class as compared with the other; but to maintain, even in this upper realm of his labours, the same distinction into the analytic and the synthetic, the experimental and the a priori, or absolute truth, which everywhere characterizes his researches and his teaching. The ladder planted on earth seems to lose itself in the dazzling heights of heaven; but it still remains a ladder of twofold passage, of ascent and of descent. As from the body we have climbed to the soul and its substantial world, so from it again as a new basis of actual experimental knowledge we climb to those principles of essential truth, love, and life which constitute that "internal sense of the Word which is in heaven." Thence there remains but one further vision for the adoring soul-that which reaches up to Him who is the eternal Word, who in the beginning "was with God and was God, and by whom all things were made." And yet it is solely by virtue of this descent all the while into the author's mind of that truth which he "received from the Lord alone, while reading the Word," and from no angel and from no spirit, that his writings acquire their synthetic unity, their a priori authority, their power and meaning as revelation. We behold the eye seeing in light the face of its own Creator. We see in all this splendid accumulation of scientific and philosophic knowledge. and in this laboriously acquired method, and these subordinated sciences, the most perfect of instruments capable of being constructed out of the elements of human reason, the divinely prepared organ and the living responsive human agent by which a veritable science of God was to be made possible to men, and things hitherto concealed were to be made known. Even in the world beyond there will still remain the axioms, the necessary assumption, the truths a priori, the distinct realm of revealed as entirely different from experimental knowledge, as here; but as truly there will be a world of actual sensitive life, where knowledge will be acquired by observation, and the reason will find a higher and nobler field of exercise than it has ever found in all the heights and depths of nature. Even in the spiritual world what is revealed remains forever distinct

from what is "heard and seen." It were possible for any man, should God permit, by the opening of his spiritual senses to have conscious knowledge of the spiritual world, as was the case with the prophets and evangelists, with Paul and with Swedenborg! What they might communicate of things heard and seen in that world might seem to us indeed, and might worthily be called, a supernatural, a miraculous kind of knowledge; and yet it would consist of things wholly within the scope of human observation and discovery, although of an extraordinary kind. Not such is that knowledge of truth revealed which can come but from one source alone—the Word, and God speaking through it to the mind worthy and capable of receiving such a revelation. The relation of Swedenborg's scientific or inductive writings to his theological writings finds its explanation, therefore, in the more subtle but similar relaton borne by his descriptive to his doctrinal, theological writings. In the one we have the truths in the inductive or ascending order; in the other in their deductive order, and descent from principles to application and corroboration.

The ultimate knowledge, the ultimate discovery, is after all alone in God and from God. As all life is from Him alone, so is all truth and all knowledge; and therefore in one sense all knowledge is revelation. But while we are allowed to procure some knowledges from without and "as of ourselves," in order that we may enjoy that individuality and personality essential to our having any moral and rational quality, there are other knowledges that can be given us only in that revelation wherein God manifestly speaks, and human sense and human reason listen and obey. So are we kept mindful of God and of our own insufficiency, lest we too should desire to "become as gods, knowing good and evil." So is the vista ever opening above us, inviting us to endless aspiration,

longing, hope, and adoration.

That Swedenborg fell short of his quest in failing to find in nature the real quality and substance of the soul is true; but this is a truth in which he and the world have reason to rejoice. Had he reached that shore too soon, there would his career have stopped. While the soul, like an undiscovered continent, remained still hidden from view, here in this stupendous series of works the great ship was being constructed which was indeed at last, over waters all unknown, to carry the bold navigator thither. In this ship, the sublime doctrine of Correspondence, by favoring winds of heaven he was carried to the great world of spiritual substance and spiritual life; and thence by the same vehicle, so wondrously constructed, he has brought to men an intelligible account of this new and interesting realm, and enabled them to read the deep arcana, hitherto hidden but now revealed, which lie equally in all things of nature and in the Word of God.

Finally, Has the science of to-day aught to learn from the lesson of Swedenborg's heroic labours and their result? Is it the lesson of

a sublime tragedy, of a vast hope crushed, of a magnificent structure which fell because of its too near approach to the skies? In other words, Shall we regard the stupendous scientific and philosophic achievements of Swedenborg as of no worth, seeing that they failed to bring him to his desired goal-a true knowledge of the soul? Far otherwise do we read the lesson of these pages. The utterance they give forth is that of cheer and of hope. They speak alike for the science of to-day as for that of a century ago, the glorious promise of a reward to be reached higher even than that sought for; of an end whose realization, only blindly striven for in the ascending ladders of knowledge, finally fills and illumines all the subordinate science with a light, a warmth, a beauty inconceivable before. For all truth is one; and human science on every plane is but the enfolding of the higher and diviner forms of truth in those which are lower and more within the grasp of man's varying intelligence. Every scientific fact and every true philosophic deduction is a stone laid and a scaffold raised for the building of that great temple in which humanity is yet to worship its Creator and its God. Into this natural knowledge, as into "all manner of precious stones," the light of Divine revealed truth shall flow; and thus the glory of God shall lighten the whole domain of the human intellect. The scientists of to-day, with their careful elaboration of the facts of sensuous knowledge, are building wiser than they know; their own aims, the particular theories they seek to establish, are of minor account they are the baubles placed before the child to induce it to walk. Even the selfish incentives of pride and glory are useful in stimulating minds otherwise idle and sluggish to great achievements. How much more so shall be the sincere love of truth for its own sake, and the desire of a genuine advancement of humanity which inspire the minds of many of our greatest thinkers and workers! As in the case of Swedenborg, the Divine wisdom knows how to use for its own ends, which are the final elevation and blessing of mankind, these results of human research and study. Not only is the earth thereby made new, but there are created also new heavens, in which righteousness shall dwell, and in whose society and kingdom of uses man shall realize the end of his creation and the true glory of God.

FRANK SEWALL.

URBANA, OHIO, Oct. 22, 1886.

PREFACE OF THE EDITOR OF THE LATIN EDITION.

The original manuscript of this posthumous work, which with two others I was enabled by the liberality of the Royal Academy at Stockholm to borrow in the year 1848, was thus described by the learned librarian of that institution:

"This book, which is in Swedenborg's own handwriting, contains 130 leaves fol. max. On the back it has the title (printed by the binder) 'Physiologica et Metaphysica,' and it bears the same title also in the old manuscript catalogue of our library. Folio 110 is wanting, which makes it doubtful whether this Dissertation on the State of the Soul, etc., is complete, or not. For the same reason, the heading and beginning of the next Dissertation, which is contained on folios 111, 112 (page iv.), are wanting. The remainder of this book, from folios 118 to 127 (page xx.) is occupied by a Dissertation which has the title 'Ontology' prefixed to it, at the head of folio 118. From the commencement of this Dissertation, certain subjects are considered in general, and are afterwards treated severally under various heads. As for the manner of treatment, the opinions of Wolf, Baron, and others, are for the most part stated first, and the author's own opinion then given, or at least intimated. But like many other things contained in Swedenborg's MSS., this Ontology is not complete, being only a sketch, which the author proposed to develop afterwards. The whole book is closely written, and in some parts in a cramped hand, and will be difficult to read and decipher."

According to the vote of our Society (the Swedenborg Association, founded 1845) which is the patron of these three publications, we have omitted in the present treatise the attached folios 118–127, inscribed Ontologia. The chapters of this omitted Dissertation are: (I.) Form, Formal Cause; (II.) Figure; (III.) Organ, Structure; (IV.) State, Mutations of State; (V.) Substance; (VI.) Matter, Material; (VII.) Extent, Extension, Continuous, Contiguous, Part; (VIII.) Body, Corporeal; (IX. Essence, Essentials; (X.) Attribute; (XI.) Predicate; (XII.) Subject; (XIII.) Affection; (XIV.) Accidents; (XV.) Contingents; (XVI.) Modes, Modification.*

^{*} This valuable Dissertation is now accessible to the English reader, having been translated and published in the year 1880, in a volume entitled "Ontology; by Emanuel Swedenborg. From a Photolithographic copy of the Original Latin Manuscript still preserved in the Library of the Academy of Science at Stockholm. Translated by Philip B. Cabell, A.M., Professor of Ancient Languages in Urbana University. Philadelphia: J. B. Lippincott & Co., 1880."

We have given this work the title "On the Soul," and also designated it as "Part VII. of the Animal Kingdom," because it forms a supplement to that work, and the Author himself, according to the index prefixed by him to that work, intended to treat in "Part XVI., Concerning the Soul and its State in the Body, its Intercourse, its Affection, its Immortality; also concerning its State after the life of the body."

AUTHOR'S PREFACE.

It has been my purpose studiously to investigate the nature of the soul and the body, and their intercourse; and also the state of the soul in the body, and its state after the life of the body. But in order to attain the end the means must also be sought; and while I was meditating in what way I might proceed, whither I should look, in what way I must direct my course as to the goal, I at length became aware that there is no other field of exploration then that of the anatomy of the organic body of the soul. For in this she disports herself and runs her course; and for what she is, in her own field, she must be inquired after in her own domain.

For this reason I have treated first of all of the blood and the heart, and at length of the particular organs and viscera of the body; then of the cerebrum, the cerebellum, the medulla oblongata, and medulla spinalis.

Supported by these investigations I may now make further progress. I have pursued this anatomy solely for the purpose of discovering the soul. If I shall have furnished anything of use to the anatomic or medical world it will be gratifying, but still more so if I shall have thrown any light upon the discovery of the soul. For the body itself, and especially the human body, and all its organs and members, are so wonderfully harmonized that nature has here brought together and infused all her art and science and whatever is inmostly concealed, so that if one desires to investigate nature here in her supreme and inmost recesses, he must explore these particulars; and the longer he lingers the more wonders and mysteries are brought

to light, and if thrice the age of Nestor were his, they would still be unexhausted. It is like an abyss, and only wonder remains at last. Thus in order to explore the soul, I must unroll these manifold coverings which hide her—as though residing in their midst—from our view. I must proceed by the analytic way, or from experience to causes, and through causes to principles; that is, from posterior to prior. This and no other way is granted us for the attainment of the science of the higher grade. As soon as, therefore, by this way, we shall have arrived at genuine principles, then first may we proceed by the synthetic way, or from priors to posteriors, which is the way of the soul herself, acting in her own body. This is the angelic way, for then they see from the prior or first things, all posterior things as subject to themselves. Therefore, before I treat of the soul synthetically, or a priori, or from first principles, it is necessary that I acquire experience and effects by this human or analytic way through posterior things, or by that ladder which leads us up to those principles and to that heaven. Hence to mount to the soul is only possible through those very organs by which she herself descends into the body—thus only through the anatomy of her body. But still it was not permissable to pass over from the organic and natural body to the soul, or to the spiritual essence, which is also immaterial, unless I might first lay down some way which should lead me thither. Therefore, I have been obliged to work out certain new doctrines, such as the doctrine of forms, the doctrine of order and degrees, the doctrine of correspondences and of representatives, and finally the doctrine of modifications,—doctrines hitherto unknown; which are the companions and leaders without whom we shall attempt this passage in vain. Concerning these we have written in the Fifth Treatise, or in our Introduction to a Rational Psychology.

And so now at length we may treat of the soul from principles, or synthetically. The learned world, from the

earliest ages up to the present time, when that which has been so long conceived is now to be put forth and born, has laboured constantly after this attainment to first principles. For this have existed all sciences, both philosophical and physical; for this has been tried every experiment which might afford illustration. Here culminates the desire of the world of learning, whether it be that we may speak from genuine first principles, and treat synthetically of posterior things; for such is the angelic perfection and celestial sciences, and the highest natural science, and such is therefore the innate ambition of us all; or that we may emulate the integrity of our first parent, who from prior determined all posterior things, and thus not only saw universal nature beneath himself but even commanded her as his subject. For it is the pride of erudition to judge of effects from principles. Hence it appears how much is involved in attaining to true principles, which can by no means be done except in so far as these be learned by the posterior way, or that of the senses, and of the sciences and arts which are human; these, however, are not of the soul itself, in which, nevertheless, they are all grounded, and from which they flow.

But the way from experience, through the sciences both physical and philosophical, to prior things and principles themselves, is not only an arduous one but most lengthy; nor is one field only, but many, to be explored. More than the ages of Nestor are needed; for there will constantly occur such things as will confuse the mind and pursuade it to feel as the sense impresses it. Then it believes it has grasped a thing accurately because it operates according to the testimony of the senses, which reasoning is just so full of hypotheses and errours. Nay, such is the higher nature that it is the more hidden from us in the degree that we consult the senses. For the sense darkens the mind the more its rays are concentrated upon it. The senses are themselves as so many shadows, so that it seems as if the light itself of the sight and of

the imagination fled away, that we may plunge into these shadows; and the shadows become lighter in the degree that we can dispel the rays [of sense].

For they are, as it were, of another sphere of light; and thus can the light of [physical] sight and of intelligence mutually extinguish each other. Wherefore also some of us do not love the light of wisdom because it dims the light of the imagination, according to the saving of Plato. Therefore I have laboured with the most intense desire that I might transcend from the one to the other: and therefore, kind reader, if you will deign to follow me thus far, I believe that you will perceive what is the soul, what is its state in the body, and what after the life of the body. But the path is difficult. Only may my companions not abandon me midway; but if you will leave me, I pray nevertheless that you will grant me your favour, and this you will do if you are persuaded that the end before me is the glory of God and the public good, and nothing whatever of selfish gain or applause.

Part First.

THE SENSES.

I.

THE SIMPLE FIBRE, THAT IT IS CELESTIAL IN ITS NATURE.

(I.) The successive formation of the blood vessels from the simple fibre.*

The simplest fibre is the form of forms, or that which forms the other fibres succeeding in order.

The simplest fibre by its circumflexion forms a certain perpetually spiral surface or membrane which is itself the second, the medullary or nervous fibre of the body, and is simply a little channel constructed from the simplest fibre, but together with the fluid which permeates it, constituting a fibre.

This fibre, therefore, because it descends from the prior, or is the prior fibre thus convoluted, and therefore nothing else than the simple fibre itself, flows by a spiral or perpetually circular flux.

This fibre, when it falls into the provinces of the body, again forms a kind of little gland not unlike the cortical, from which proceeds the bodily fibre, and this forms the little tunic which infolds the arterial vessels.

The fibre further descends into the greater arteries, and there also forms glands which again send out fibres

^{*} This chapter gives in outline the results of the author's elaborate discussion of the Fibre in the *Economy of the Animal Kingdom* and elsewhere in his works. Concerning the production of the Simple Fibre, its relation to the spirituous fluid and to the soul, see vol. ii., p. 280, seq. [Tr.

from themselves, and from these is produced the muscular tunic.

Thus the nervous, glandular, tendonous, and muscular tunics, with the membranous, constitute the arteries and veins, all and each being formed of fibres.

Thus the blood vessel is produced from the simple fibre by continuous derivations.

The arterial vessel can accordingly be called the third fibre, the medullary fibre the second, and the simple fibre the first.

In this respect, also, the first fibre may be called the first vessel, then the second vessel, and finally the vessel properly so-called, or the blood vessel.

So with the fluids themselves that flow through them; the first vital essence is the supereminent blood,* or that of the supreme degree; that which is of the second fibres is the middle or the purer blood; and that which is of the arteries is the blood properly so-called, or the red blood.

Therefore is the simple fibre the proper animal essence,†
the form of forms.

(2.) There is nothing else continuous in the whole body; or its whole form is the simple fibre alone.

All that is continuous in the body or essentially determined,‡ that is, formed, is the simple fibre.

For there is nothing in the medullary fibre but the simple fibre.

There is nothing in the blood vessel but the medullary fibre.

There is nothing in the whole body which is not woven together of vessels and fibres.

[#] Econ. An. King., ii., 49; 217-221. [Tr.

[†] i. e., the proper animating or psychic essence. [Tr.

[‡] Econ. An. King., ii., 248. [Tr.

Even what does not so appear,—as the tendons, cartilages and bones,—yet this also experience shows to have been woven from the vessels and fibres originally.

Thus there is nothing in the entire body but simple fibre, which is its whole form.

Nor does there enter into it anything continuous or coherent except the simple fibre, the only continuous substantial.*

Arguing further, if the simple fibre is an animate product from its first essence, it follows that there is nothing in the entire animal form going to form it but this essence itself.

The fluids of various kinds which are in the medullary fibres and in the blood vessels, as the serous fluids, do not constitute the form, since the forms consist of fibres; but these fluids flow within the fibres and vessels.

(3.) If that essence is the soul, it follows that this alone is what constitutes the form.

(4.) The Simple Fibre is of a celestial nature. What the Body is.

Now, inasmuch as every part or individual of the first substance is of a celestial form and corresponds to the substance of heaven or to the first and most universal aura,† it follows that there is nothing in the simple fibre which is not a celestial form, and this alone is ruled by spiritual‡ forms.

This form, because it is above other forms, cannot be touched at all by them, still less can it be hurt; it is

^{*} Econ. An. King., ii., 280, 281. [Tr.

[†] Econ. An. King., ii., 35, 180, 298. [Tr.

[‡] The author here uses the term "celestial" as referring to the aural or highest atmospheric heaven, and as inferior to the spiritual or truly supernatural. [Tr.

most secure from all injury. How can a compound act upon the simples of which it is compounded? It is most remote from them, nor are they dependent upon it.

- (5.) This fibre therefore is not terrestrial, as Aristotle teaches, but of a celestial nature, essence and form.
- (6.) Hence it is immortal, nor can it perish, because it cannot be touched.
- (7.) What is terrestrial and corporeal is not the fibre, but rather that part of the red blood and of the middle blood in the globule which serve there for an instrumental cause, in order that the first essence of the blood may descend in series by successive derivation and be in the midst of the outmost world; in a word, that it may constitute the bloods, in which, nevertheless, that celestial form reigns.
- (8.) That from which the bodily blood exists is only corporeal, nor does it contribute anything to form except that it runs through these fibres and adapts them so that they may enter into forms.
- (9.) This part or this corporeal is mortal and relapses to earth when the globules of blood are dissolved; but not so the fibre, which of itself passes away, while the body remains under the form of a corpse.

†(10.) Paradox concerning the Simple Fibre.

^{*} Econ. An. King., ii., 343. [Tr.

[†] In numbers 10 to 14 the author gives only the titles of subjects treated at length by him elsewhere, but especially in the MS. known as "Codex 74—Anatomica et Physiologica." There the Simple Fibre is treated of in numbers 249 to 297; the Circle of Life in numbers 319 to 327; the Arachnoid Tunic in six chapters, numbers 328 to 369; and the Diseases of the Fibers in numbers 370 to 561. For information regarding this MS. and the published portions of it, see Documents concerning Swedenborg, by R. L. Tafel, vol. ii., part ii., pp. 866 and 925. See also Occonomia Regni Animalis, ex autographo auctoris, etc., ed. Dr. J. J. G. Wilkinson, Londini, 1847. [Tr.

- (II.) Concerning the Universal Circulation of the Fluid of the Body, or the Circle of Life. Concerning the Perpetual Solution and Composition of the Blood.
- (12.) Concerning Diseases of the Fibres.
- (13.) Concerning the Derivation of the Diseases of the Animus into the Diseases of the Body, and vice versa.
- (14.) Concerning the Arachnoid Tunic.

II.

THE SENSES.

(15.) The external organs of the senses, as the ear and the eye, are instruments for modifying the air and ether, and these modifications are themselves the principal causes why the sensations exactly correspond to the mediate organs.

As to the ear, this is the instrument which receives the modulations of the air; for it receives and applies to itself every form and mode of the forces flowing to it. same is true of the eve in relation to the ether. The ear in this respect differs from a musical or acoustic instrument in that it not only receives but also sends out and further extends the sounds. So does also the eye differ from optical instruments. The eye is, indeed, like a camera obscura, which reproduces most exactly the images transmitted from the object opposed, without changing them into other forms and other colors. But in the eye these modifications do not simply pass over to the retina; the operations of the eve excite the essential determinations to acting likewise even to the least retina, from which through the optic nerve the same sight is propagated to the com-• mon sensory. Thus the sensations correspond exactly to the modifications of the organs. Likewise in taste and smell; for the external form of the parts, which is generally either round or prickly, affects the papillae of the tongue or nostrils; the organ is affected by these touches, which are innumerable, and thence a similar sense results.

(16.) The sensory fibres leading to the common sensory are exactly accommodated to the form of the modifications flowing in and affecting them; thus the sensations flow by a natural spontaneity from the circumfluent world through the fibres in the animated world even to the Soul.

In the inquiry as to what is the form of the modifications of the air and of the ether we are led to conclude from experience that there can be no other modification of form than that of the form of the parts. For the volume is composed of the parts, and if the parts are changeable a like condition ought to result in the whole volumen of what is set in motion as in the single parts, which are so many symbols of the common motion. The form of the modifications of the ether is spiral or perpetually circular, and that of the modifications of the air is simply circular; for such are the external forms of the parts, as may be demonstrated by numberless proofs. If it be asked, then, what is the form of the fluxions of the fibres, it has been proved in the treatise on the Fibres that the form of the fluxions of each compound fibre is spiral, and that the form of the fluxions of many fibres taken together is circular; thus the one form exactly corresponds to the modifications of the ether and the other to the modifications of the air. But the form of the higher ether is vortical, and this corresponds to the substantial form of the spiral glandule. Thus when modifications of the auras flow into the miniature world, or the animal system, they continue their flow in a similar nature, nor are their essential determinations changed.

(17.) The sensations are carried from the external organs to the internal organs as if from a heavy to a lighter atmosphere, or from a lower to a higher region.

Light bodies are raised from the centre toward the the surface and emerge, but those which are heavy fall to the centre and seek the bottom. So do sensations strive from the outermost to the innermost or from the lowest to the highest, while actions fall from the innermost to the outermost or from the highest to the lowest. Thus sensations may be compared to the lighter and actions to the heavier bodies.

The cortical brain holds the inmost and the highest, for to climb thither is upward, but thence toward the surface of the body is downward. That the cortex of the brain also occupies the highest region of the body may appear from the fibres themselves and their nature; the most fluid and the softest fibres are near to the cortex or to their first source; those more remote from the cortex are harder and more stationary, and as if being more compressed, when rising to a softer fibre they rise to the purer region and vice versa; which also is the reason why the nerves or the sensory fibres are soft, and the motor fibres are somewhat harder; and that the softness increases according to the ascent.

(18.) The sensations do not arrive at any special glandules or glandular congeries in the brain but at the universal cortex, so that there is not a single cortical glandule in the entire brain which does not become a participant of each sense and of its least movement, degree and difference.

This the anatomy of the brain declares with sufficient distinctness, for each nerve and each fibre when it is immerged in the medullary lake of the brain, so merges itself with all the neighbouring ones that all differences well nigh disappear. For one fold is continually connected with another, a certain subtile membrane intervening between every fibre and every vessel and the one next to it,

which membrane joins and binds fibre to fibre and artery to artery. Those intervening threads in their being drawn out from the fibre we call the emulous vessels of the fibre. these are inserted the most delicate threads drawn from the pia mater. Thus it may clearly be seen that in the brain, in the cerebellum and in either medulla there is nothing whatever that is discontinuous or disjoined; and the sensation, which is a most subtle kind of trembling of a certain atmosphere, is not able to press solely upon a single fibre, or any particular fibres, as far as to their origins, but is compelled also to pursue its journey through all that is continuous from the fibre; and this is true as well of the trembling and vibrations of harder bodies. The same appears from the special investigation of each sensory fibre; for the optic nerve diffusing itself in the beds of the optic nerves cannot help pouring itself upon the entire circuit of the brain, since the fibres drawn forth from this circuit and concentrated on a firmer base unite upon the beds of the optic nerves; and if the sensations follow the flux of these they cannot but terminate in the common surface of the brain. The olfactory nerves from the continued pituitary membrane so immerse themselves in the oval centre or medullar globe of the brain that they have their origins from all, for the mamillary processes being inflated expand the whole medulla of the brain. The acoustic or auditory nerves emerging from the annular protuberance associate themselves with all the fibres which are sent out from the brain and from the cerebellum. And so in other instances; wherefore the ratio of the sensations is the same as that of the modifications: for these having begun in the least centre diffuse themselves about into the entire periphery. From these considerations it follows that there is no part of the cortex which does not become participant and conscious of the inflowing sensation.

(19.) The most distinct sensation exists in the cortex of the brain, especially the sensation of sight, perception and understanding.

Where the cortical substances are most delicate and most expanded, there the sensations should be the more perfect and distinct; for that the cerebrum feels, perceives and understands, but not the cerebellum, is because the cortical glandules like so many little sensories are in a state of perceiving modes distinctly. In either protuberence, or vertex of the brain, that is, in its supreme lobe, this cortex is distinctly divided; for an infinite number of fissures and furrows separate the congeries, by which means the cortex may be expanded and drawn in any direction; so that when the distinction is the more perfect, there is also the more perfect sensation. This is the reason, too, why all the convolutions and bendings of the cortex concentrate themselves in this, or tend hither by a continuous flux and union. This is observed as well in outward as in inward intuitions; we even direct our contemplations toward this prow of the brain. Also when this is injured the faculty of clearly seeing and perceiving is changed according to the degree of injury, as appears from various diseases of the head. Thus sensation belongs, indeed, to every cortical glandule, but it is more perfect in one part of the brain than in another; for in one it is more particular and single according to the divisions of the brain, while in another part it is more general, and hence the sensation is more indistinct and obscure, as in the lowest layers of the brain and in the cerebellum.

(20.) No cortical glandule in the whole brain is absolutely like another, hence neither are the little sensories similar to each other, which are so many corti-

cal glandules: but a certain variety intervenes, which nevertheless is so harmonious that not the least difference occurs in the mode of any sensation but what is perceived more perfectly in one glandule than in another.

That there occur infinite mutations of state, both essential and accidental, of the cortical glandules, which are so many internal sensories, has been sufficiently demonstrated in the treatise concerning those glandules. For there are larger and smaller glandules, harder and softer, consisting of more or of less fibres; there are those whose state is more constricted or more expanded, some associate with more some with less; but to enumerate every difference would be too prolix. The cortical glandules in the brain are of one kind, those of the cerebellum are of another, and those of still another in the medulla oblongata and the medulla spinalis; also they are of different species in the brain itself, in its vertex, in its borders, on the outside near to the pia mater, and on the inside around the ventricles. All the cortical glandules, the beginnings of the fibres, the little sensories and motors, are internal. Now in order that the brain may be free to receive all sensations and feel every difference, it is necessary that there should be order among its sensories. This order must be wholly harmonious; even if one glandule receives a purer, another a grosser mode, nevertheless we must communicate the sign of its sensation to the others as a part to the whole. This is called the harmonious variety, which is so proper to nature that it deserves to be called the nature of nature. Such a variety exists in the particular fibres, in the particular muscles, in the single parts of the atmosphere. For similarly are the lowest atmospheres more compressed than the higher. in such a way, nevertheless, that between all there is a certain harmonious variety. Thus the particulars contribute each its own part to the common and public estate.

(21.) The sensations diffused throughout the whole brain are to be conceived of as winding themselves around in a spiral manner, or according to the form of motion of a circuit and of the cortical substances; and the purer sensations revolve vortically through the cortical glandule; hence according to the most substantial form itself of the sensory organ.

The convolutions of the cortical glandules in the brain flow into the form of the most perfect spiral; and because the sensations touch every point, every fibre, and every cortex of the brain, hence we must conceive of a similar circumvolution and whirling motion of the sensations; for then an easy fluxion and propagation of these proceeds from a part into a whole. In the same manner the modification takes place in each individual cortical gland, whose form is perpetually spiral or vortical. For every active force impressed upon an organic substance flows and is determined most exactly according to the form of the latter. To flow otherwise would be contrary to the stream and current of its nature, or contrary to the rotation of its axis. Also the sensation circumgyrates by a similar form when it follows along its fibre, therefore also when it emerges from it. So are the forms of a fluxion and that of its atmosphere or of its modifications similar. So do the macrocosm and the microcosm mutually correspond, and impress the same modes upon each other. Such a whirling motion openly appears in the external organs also, when the mind is inebriated or the brain affected with a like disease or delirium. From these statements it may appear with what winding about and circumgyrations the inmost sensation or the understanding is carried on; the form of whose fluxion is celestial; and so on.

(22.) We may perceive the disharmony of sensations by ourselves and naturally.

That the soul naturally apprehends and is conscious of every thing harmonious or inharmonious which occurs to any sense, appears from the phenomena of each sense. Harmony of touch in the outmost skin tickles and excites laughter: harmony of taste and smell flatters and gratifies the organs in such wise that it creates a pleasure, sweetness and appetite. Harmony of hearing so pleases the ear that one smiles at what is heard said: so with harmony of sight, whence is beauty, comeliness and delights. But disharmonies produce the contrary effect, for these sadden the soul and the mind, and induce a certain horror, even hurt, and thence aversions. Even in the imagination and the thought a similar concord of truths, which are so many harmonies, is likewise produced by nature herself without science to direct, and without art as a mistress. Thence it comes that those whose minds are more healthy, and who are imbued with some knowledge, apprehend natural truths at once, and lend them their approval; but that the same truths are opposed is the result of a vicious state of their mind. That the soul perceives the harmony or disharmony of images and ideas at the first glance appears plainly enough in the brute animals; for birds know of themselves how to ingeniously construct their nests, to choose the food most proper for themselves, and to avoid what is harmful. The spider weaves its web with the most perfect geometry, not to speak of other instances which are effects of a natural perception of harmonies. Even the organs themselves are not only soothed by harmonies and pleasant things, but are also restored by them; while on the contrary they are injured by those which are inharmonious. The reason is that the soul is pure intelligence, and is the order and truth of its own microcosm. Hence the cognition of order and of truth is a faculty born with us, and

one that is rarely learned. Neither can the senses otherwise exist, for in order that there be a sense there must be the harmonious mixed with the inharmonious; from the difference of these and their connections and their situation arises sensation. In the same way, from commingled truths, fallacies, and falsehoods arise ratiocination, thoughts, discourse, controversy, opinions. Without these there would be very little speech, and neither schools nor sciences; and the shelves of the libraries would remain empty.

(23.) In the same inmost sensory organ the end of the sensations and the beginning of the actions meet.

The cortical glandule is the last boundary where sensations terminate, and the first prison-house whence the actions break forth; for the fibres, both sensory and motory, begin and end in these glandules.

Sensations penetrate from the outmost to the inmost; but actions run from the inmost to the outmost. Thus the cortical gland is as well a little internal sensory as a motory organ, and both active and passive, as are all the more perfect organic substances. To suffer as well as to act is the perfection of natural bodies, whence comes elasticity, and the forces and powers thence resulting. The superior forms receive every assailing force, and return a similar. If a comparison be instituted with the sensories here described, sensation itself is the passion to which a similar action corresponds. The object of the action may be to determine what is felt into act, or to represent through the act the idea perceived; for action is the actual representation of the idea of the mind. This is the reason why the perceived idea so quickly breaks forth into act, as in speech. It would be otherwise if both action and passion did not meet in one and the same organ.

III.

THE INTELLECT AND ACTION.

(24.) Intellection, which is the ultimate of sensations, does not immediately turn itself into will, which is the primary of actions, but a certain thought and judgment intervenes; thus there are intermediate operations of the mind which connect the last of the one with the first of the other.

There is a certain progressive series or gyre as intellection passes over into will. Undoubtedly there intervenes the thought, which is the last involution of things perceived and understood, and the calling forth of like things from the recess of the memory. But the judging or judgment is the reduction of the things thought into a certain rational form, those things being cast out which have nothing to do with the matter in question; at length comes the conclusion and so the will. The intellection itself is the first part of the operations of the intellect, the thought is the second part, judging is the third, conclusion is the fourth. All of these taken together are designated by the one word "intellect." But this gyre is often accomplished with such presence of mind and velocity that it hardly appears that there are so many intermediate parts between the first rational perception and the beginnings of actions. It is sometimes run through in a single moment. That there is a similar series of operations in single substances gifted with perfect elasticity to which the above might be compared, I do not doubt; it may be that the elatery of nature, when it is subjected to a force or impetus, resolves and restores itself

by similar intermediate operations to a similar act, although it may seem to be instantaneous. But we cannot further enlarge upon the subject here.

(25.) There is such a connection of the rational perception or the intellect with the will or the beginning of actions, that is, of the passion with the action in one mind, that as the one is so is also the other, or that a mind deprived of perception is also deprived of will.

The perception of the mind can be compared with passion, but the will with action, hence the perfect mind with the perfect elatery in nature. For it is a faculty of the elatery that its elastic force is greater as the body is more compressed; that the elatery is equal to the compressing force; that the force of an elastic body is determined by the actions of the compressing body; that the elatery liberated from the compressing force is restored at once to its former condition; that the body in which there is a perfect elastic force, however much it may be compressed, loses nothing of its own force but always restores it and puts forth as much as it has itself suffered, so that a similar force and impetus is diffused into what is immediately around, and thence into the nearest vicinity, and thence everywhere; that in the striking together of elastic bodies the centre of gravity, before the conflict and after it, is moved with the same rapidity, when moved at all, so that in the meeting of elastic bodies the state of the centre of gravity is preserved; besides many other things which might be compared with this organic substance and its rational operation, and might be explained by correspondences to the apprehension of the intelligent.

In the meanwhile, that the will is such as is the intellect or the perception appears from the phenomena or the affections of the mind, of the animus, or of the brain. For the will increases with perception itself in youths and in adults. When one perishes the other perishes, for they meet in the same organ. When the brain is injured, compressed with foreign matter, or disturbed in its order, not only does sensation become unsteady according to the degree of injury, but also action, as in loss of memory, in catalepsy, in lethargy, in sleep, and other conditions. The reason is, that nothing can be carried into the will which does not come from the perception; for the will is the conclusion of the thoughts, and to it belongs the power of acting in accordance with the ideas of the thoughts.

(26.) The first perception cannot be at once transferred into thought, still less into will, unless some force accede which incites and promotes; and that without this exciting and promoting force perception would at once be extinguished, and with the perception the thought, the two going hand in hand.

That the first perception is a bare interior sensation or mere passion follows quite as well from description as from reflection; for that the images of sight pass over through the eye and the fibres of its nerve to a common sensory or a certain interior sensation, is what is experienced whenever the eyes are opened. It is the same with sound and its modulations in the air, with taste in the tongue, and smelling in the nostrils, and touch in the body. But in order that this perception may become a sensation interior still, and that the rational sensation which is called intellection may pass over into thought and from this stage into will,—this cannot take place without some accessory and stimulating force. What these forces are which are here added, I will proceed to state.

(27.) The first force is the harmony itself and the pleasure and sweetness thence proceeding, which is perceived in the external and internal sensory organs at the first impression of an object, and which so affects the animus* and mind, and vivifies the perception that this cannot help being continued even into the will.

These facts are clear in themselves. For what is beautiful and comely at once affects the eye or internal sight with a certain latent pleasure. At the harmony of similar sounds, as also the sweetness of taste and odour, and even the blandishments of touch, the mind is immediately pleased, wherefore its perception is not quiet, but is at that moment actuated, and calls forth from the inmost of the memory similar ideas, whence comes thought; and this is followed by will.

(28.) Another force is the love of self-preservation or the love of self, which kindles the internal sensations, or, from the first perception even to the last, excites these sensations into the beginning of action; and without the accession of such a force our intellect would be deprived of its life, and would languish away.

If we examine interiorly the natural harmonies themselves which are first perceived in the sensory organs of the body, it will appear that these are so many conservative forces of the body: for not only do they afford blandishments to the sense, but also they restore whatever is defective in them, as may be demonstrated from many phenomena. For harmonies revive the soul; the

^{*} The animus is the lower or sensuous mind as distinguished from the mens or intellectual mind (vid. nos. 198, 291, et al). [Tr.

vernal greenness and various hues of the meadows restore the sight, because these exhilarate the animus. So also symmetries affect the hearing. But the contrary things offend and bring injury; hence the body suffers, and the animus grieves. It follows from this that there is a certain impelling and active force in the natural harmonies, because they contribute to the preservation of the body. The love of self is the first of all the loves of the soul, of the desires of the mind, and of the cupidities of the body. All desires of ends proceed thence as though from their source. There are also loves diverted as streams from this source, which are excited by particular perceptions. These are doubtless so many forces, lives, or heats, which vivify the operations of the mind, and excite them even to action. This is the reason why each one is strong from his own loves and desires, and each one lives from his own life; and that those who are deprived of such loves and desires are also dull of disposition, stupid, and dry stocks, possessing without doubt a spirit and a blood equally cold and sluggish.

(29.) From these loves are born the desires of some end, which desires are the forces themselves present in the intellect and in the will.

There is no intellect or rational perception, and therefore no thought or judgment, and still less a will which goes hand in hand with perception, without the intuition and desire of a certain end. Without this, or without an end, the will is never determined into act. Wherefore, in order that there be a will, it is necessary that there be in it an end which the mind contemplates. But there are superior and inferior ends. The superior ends are those only of the human mind, nor do they look solely to the preservation of the body or of self; but they regard the preservation of that society of which the mind forms a part,

and many other things beside. In place of these rational ends there are with beasts corporeal ends, the desires of which are called lusts and pleasures. These ends are solely for the sake of self-preservation, it may be of the body simply. Such an end, because it does not descend from a certain source and principle of reason, prefers the preservation of self to the preservation of society as a whole. But we shall treat of these ends hereafter, when treating of the animus and the mind.

(30.) There is nothing innate in the human mind except a perception of order and of harmonies and of truths in forms and in substances, in forces and in modes; by which the rational mind is affected in so far as they concern the preservation of self. But other things, even the forms themselves, the substances, the forces, the modes, the truths, are to be learned by the aid of the senses; whence come discipline and the arts. It is otherwise in the brute animals.

It has been shown above that the harmonies themselves are innate with us, or that we perceive them without a teacher; as the sweetnesses of taste and smell, the
symmetries of sound, the excellencies and beauties of
nature; in a word, the very order of things or the harmony of modes, forces, substances, and forms. Thence
also we may perceive the very truths of things, for these
correspond to the order itself in nature; and this is the
reason why order is called "the transcendental truth."*
This we clearly perceive in our intellect; for we seize
truths as it were at their bare assertion without any demonstration; and therefore some persons are said to have
in them, as innate, the seeds of virtue and of beauty.
But the form itself and the perfection of the form are

^{*} Compare Kant's Cosmology in the Dialectic of the Pure Reason. [Tr.

different things. By way of the senses and of discipline we have to procure for ourselves, scientifically and experimentally, the form, but not the very harmony itself and the order itself of the determinations in the form. The harmony and the order are natural, because they agree with the form itself of our organic substances and of their sensations and perceptions, and thus they allure them that they may soften, titillate, and pleasantly affect them: but the form itself thence resulting is something to be acquired. This is why the dispute has arisen among the learned whether ideas are innate in us or altogether acquired. The same also is proved by the reflection of our own thought, imagination and speech; for in order that there may be thought and speech an infinite number of things are requisite, which concern order alone, and this order is so strictly observed and maintained by children that the entire Peripatetic and Pythagorean schools could not in ten years reduce to rules and sciences what this or that boy brings forth naturally and of himself in less than a moment's time. We also assent to truths themselves without any demonstration a posteriori, at their very first announcement, in so far as there is in them a natural harmony and one that gratefully affects Besides the harmonies, the order, and the the mind. naturally implanted truth, there are also loves which all proceed from the love of self, although it is from doctrine alone that it can be known whence these loves proceed, and of what quality they are. But it is otherwise with the brute animals. In these there are still more possessions which are innate, be it single ideas themselves, or forms, modifications, and so on; for they are born into their sensations, perceptions and wills; and they stand alone as soon as they are put forth from the womb or the egg.

(31.) The external senses are very obtuse, gross, and feeble, and thence fallacious, so that they deceive the internal senses themselves in innumerable phenomena taken for truths and appearing to be truths. This is because these internal senses penetrate rather into the causes and principles of things. Wherefore the science of the senses is purely animal; but not such is the science which is rational and truly human.

There is indeed no other way of knowing and of understanding given us than by the sensations or by experience. that is, by the posterior which is called the analytical way. For our sensations are perfected first, then the internal perceptions, and finally the intellect; the judgment, or the knowledges of the true end, do not come until late, and in adult life; and because this way is natural and alone permitted, we have to depend upon our observing and collecting of experiments and phenomena of nature. Thus the optic science is most familiar with the organism of the eve and still knows no rules except those derived from science cultivated by experiment; so with the acoustics of the ear. The very truths, causes, and principles of natural things, yea, even of moral things, must be learned the same way. Although we may be pleased when objects present themselves to us, still wedo not know them any more interiorly than we do the beauty itself of a flower conspicuous for the fair mingling of its colours and symmetry of its parts. For in the blooming rose we of ourselves perceive nothing except the beauty, the order and the truth; the form itself, what is its colour, what the relation and position of its parts,—this it is not possible to explore without the experience of the senses. For the soul itself, which alone understands the objects presented to the senses, is itself order, law, and truth; thence whatever is agreeable to its reason pleases it, while other things it shuns and abhors.

But that there are infinite things which to the senses appear to be that which they are not, may be seen sufficiently from examples. For instance, it is an appearance that the sun, stars, and planets are little molecules instead of earths as large as ours; that we are absolutely at rest although our terrestrial globe rotates and revolves around the sun; just as it is in a ship in which we seem to be at rest although within an hour we may be borne away under full sail some miles from the port. It appears as if the antipodes could not possibly stand on their feet; as if the blood did not circulate; as if the cerebrum did not animate; and as if the ventricle did not have a peristaltic motion. It does not appear to the senses that a certain fluid flows very swiftly through the least fibres; or that the atmospheres are divided into parts, since they seem to be like waters, either continuous or as nothing. It also seems to the senses as if there were an attraction, a vacuum, a single atmosphere, and as if the ray were an atom; as if there were no substance; as if a body very swiftly moved were continuous; as if providence, fate, and fortune are mere happenings of accident; as if insanity were wisdom, fallacy truth, the becoming equally with the unbecoming honesty, and vice virtue; as if license were free will, pleasures and allurements of the senses the highest felicity and greatest good. It appears as if art were more ingenious than nature; as if philosophers were possessed of a better common sense than the plebeian world; and as if they were the wise who talk more elegantly and are skilled in languages, and mingle their sharper criticisms, or else who keep silence, or express only half the meaning of what is to be understood; as if we were to estimate people according to the opinion of others whom we believe to be possessed of judgment. Infinitely more things occur in the discriminations of the true and the false, the good and the bad, the beautiful and the becoming. These very discriminations, which do not appear to the senses, we believe to be naught so long as they are concealed,

be they in reality ever so numerous and striking in form. So in other instances.

From these things we may conclude that if we have faith in our senses only, we shall be more like animals than rational beings, for the brute animals are easily deceived by fallacious visions or by appearances; and that, therefore, in the degree that we are the more rational, or the more truly men, in that degree we shall dispel the clouds and fallacies of the senses and penetrate clearly into truths themselves, or enter into causes and principles; and the same faith we shall deny to our body, that is, we shall withdraw ourselves from the shadows of its sensations. Therefore it is not for man to become wise by means of the senses or experience alone.

(32.) The soul concurs with every sensation, perception, and intellection, but so sublimely, universally, and secretly, that we can scarcely learn what flows from the soul, and what from the body.

For the senses are what inform the mind, in order that the rational may hear; since without the experience of the senses we can understand nothing. But that we are able to understand, yea, even the power and faculty of understanding, and of reducing the several ideas to their order, is not a property of the body or of the external senses. but is of the soul. The soul may be compared with the light which surrounds the eye; without the light there could be no discrimination whatever between the less luminous and the shady, between those differences in objects whence arise colours and forms. So is the soul that which pours in a certain light in order that verities may appear as verities; while the sensations, on the other hand, add certain doubtful phenomena, which, as it were, cast a shadow on the verities; thence arise ideas and truths mixed with falsities; and from these again, opinions, hypotheses, conjectures, discussion, discourse, and speech. If the bare verities shone forth [unobscured] there would be no reason and no ratiocination; for no one could help acknowledging what another said, and thus one would feel and think just as the other. Such a state would be a most perfect one, like that of those souls whose speech is directed solely to the praise and glory of their deity. In order, therefore, that there may exist a society of bodies, it is necessary that our intelligence be mixed and not pure. But we will treat of this more at length when we treat of the intellect.

(33.) The causes of both the external and internal sensations flow universally from hence, that the soul is conscious of something that agrees or disagrees with itself: a certain body soothes or aids it, another pains or injures it; the one pleases, the other displeases; by these it is delighted, by those grieved. Thus all the senses flow from the cause of self-preservation, and the more interior ones from the love of self.

The truth of this proposition appears from examination of the phenomena of the several senses. In the taste we observe the pungent properties, such as those of the saline acid,* of urinous and other prickly substances; and also those which soothe, such as the sugary and sweet; those injure, these delight. From the mixture of the prickly and the rotund arises the bitter, the sweetness of wines, and many such flavours. Thence comes so great variety. The same holds true of the sense of smell, for this sense takes in a similar variety of parts even more subtle [than those above mentioned], which fly and flow about in the atmosphere. The hearing is a sense still more sublime; for this perceives only the harmonies and

^{*} See Swedenborg's Principles of Chemistry, London, 1847, p. 113. [Tr.

disharmonies of the modules of the air; those which are natural and in agreement are soothing; those which disagree, such as the disharmonies, produce pain. Likewise the sight, whose objects are the modifications of the ether or of the superior atmosphere. These senses come nearer to the nature of the soul. They recede as it were from bodily things: they insinuate themselves as mediators and messengers into the spiritual. The internal senses, such as the perceptions and intellections, likewise [exhibit this law]; for whatever agrees with their nature and order pleases, and that which disagrees displeases; and because natures are dissimilar, therefore, in order that the nature of one may never be absolutely the same as the nature of another,—and indeed, natures in themselves perfect are easily perverted by the errors and the fallacies of the senses, it comes to pass that what pleases one person displeases another. Still, all the senses flow universally from the cause of the preservation of one's state and order. For the soul has provided its body with sensations that it may know whatever touches its surroundings, in order that it may be informed most particularly about every change of the state of its body, which it desires to preserve. But the internal senses flow from the love of self, for love is spiritual even as the soul itself is, and from this cause it seeks praise, glory, a life of fame, felicity in the body and after the death of the body; by the love of all of these things it is led. These things gratify the mind or are most grateful to the inmost senses, and chiefly flatter them.

(34.) In the degree that forms are the more perfect they are the more grateful and pleasing to the senses, and vice versa.

In taste and smell all angular* forms are harsh and displeasing, unless the angles are so disposed that they

^{*} Compare Principles of Chemistry. [Tr.

may represent some more perfect form and excite some sense which the mind judges to be comformable and adapted to restoring the state of the body. This is the reason why the salty and the bitter often give pleasure. and the sweet and the aromatic displeasure. But the more perfect forms, such as the circular and spherical. which are next to the angular in perfection, and those still more perfect, naturally please because they are soothing; as, for instance, the sweet and sugary substances. The forms which affect the hearing are chiefly circular, for such are the forms of the modifications or of the fluxions of the particles of the air. These as they more nearly approach the circular forms are in that degree the more harmonious and grateful. Still more delightful do they become as they approach the perpetually circular or the spiral form, such as the form of the modifications of the ether, or of vision. But in the degree that they depart from these harmonies or approach the angular forms so that they become sharp, prickly, in a word, not rounded. just so far do they become disagreeable. Likewise with the sight: as its forms or those of its images become in and among themselves more perfectly spiral, and in this way mingled as to light and shade, so are they the more grateful; and, indeed, most so as they approach the forms of the higher or interior sense, namely, that which is perpetually spiral, the vortical. Then succeed the superior forms, such as the celestial and spiritual, in which each part is as it were perpetual, and every thing angular is cut off and removed. Thus every organ has its own form, which looks up to a superior and is related to an inferior one: and of every form there are infinite changes of state. and hence arise the infinite varieties of sensation.

IV.

THE SENSE OF TOUCH.

(35.) The Touch is the lowest and truly corporeal sense, whose innumerable organic substances are spread over the entire cuticle and surface of the body, and taken together constitute the organ of Touch.

Under the skin, within minute folds, as in their own beds there lie concealed molecular papillae of pyramidal shape, protected by the epidermis; they exist in such numbers that they may be found scattered throughout the entire cutaneous covering of the body; and not a point exists anywhere which these do not partially occupy on the surface; and when they apply themselves to receiving a sense, they as it were fill [that point], for they can be contracted and expanded; thence they can draw themselves in or out, and so render the entire skin sensible with themselves. Thus the organ of touch is not a continuous one, but concrete, made up of an infinite number. For every thing continuous is contrary to nature, since nature is more perfect in the degree that she is more distinct and singular in her products and compositions. For in the smallest particular nature lies hidden and thrives as if left to herself; but not in those concrete things in which her order, form and harmony perishes.*

^{*} The organ of touch is concrete, but preserves the order and harmony of the particular parts. [Tr.

(36.) The perfection of the sensation of Touch depends on the quantity, quality, position and connection of those organs, that is, on the particular form of each and the general form of all together, as also on a certain variety, since no one is absolutely like another; just as is the case with the perfection of the cortical glands, to which these things of the body correspond;

for the papillae, or those organic substances of touch, are very soft, and are accommodated to every tactile force. and they withdraw into themselves as soon as touched by anything that injures or offends, but extend themselves when they are excited and pleased with the round forms. Hence they erect themselves or become relaxed exactly according to the qualities of the shock they receive. regards the quantity, the more they are in number the more minute discriminations and the more subtle distinctions they recognize. As to quality, the softer they are the more applicable to every tactile force, hence the more sensible they are. Their perfection, therefore, consists in their faculty of changing their states, and of applying themselves to the forms of bodies with which they come in contact. For this reason they are moist, and furnished with a constant very slight humour as of a medullous nature, and there are glands from which corporeal fibres proceed, continually imbibing and transmitting this humour from the surrounding air. As to their situation and connection, or their particular and general form, so far as they are more perfect in themselves so much the more powerful are they in producing or seizing the sense; but the bare power of individuals cannot produce the effects unless all in which there is a similar power conspire to the same effect. And in order that they may conspire, a positive and mutual connection in requisite, whence may proceed an order and regard for the whole, so that, for instance, one may regard the other as the companion

of its own sense. So the entire form will concur with the particular form or the form of each one. This is the reason why, where the sense is most acute, as in the fingers of the hand and the toes of the foot and near the nails, the ridges [of the skin] lie in a spiral direction, and that they do not stretch upward but are extended lengthwise, and thus by their greater conformity bear mutual aid. As to their variety, however,—as for instance that no one of them is precisely like another,—this is evident from the difference in the sensations of touch; for the mind at once perceives these wherever the touch occurs. For the sensation is more dull or it may be more acute in the hollow of the hand or of the foot or of the finger than on the back, on the side than on the breast, on the neck than on the head. This variety, in order that the sense may be most perfect, will be an harmonious one, such indeed that the variety of the one may correspond to the variety of the other, or that a common harmony may result from the variety in particulars; like that of the cortical glands, of which we have treated.

(37.) The organs of the sensation of Touch correspond to their cortical glandules in the spinal medulla and the oblongata, as also to their cortical glandules in the covering of the brain.

That the papillae, which are the organic substances of touch, correspond with the cortical glandules of the medulla spinalis and oblongata as to those of the brain itself, appears very plainly from anatomy as inwardly examined. For the papillae are those extremities of the nerves or fibres complicated into such organic forms; since there are infinite fibres running to the skin and there branching out, as appears especially from the bodies of infants. And since each fibre derives its origin from a certain cortical glandule of its own in the medulla spina-

lis or oblongata, it necessarily follows that each papilla refers to its own gland as to its proper parent. Every sensation creeps along, following the extension of its nerve or fibre, to find the beginning of it, and does not terminate except in this origin or in the corresponding gland; thence it follows along the whole axis or medulla spinalis and emerges even at the cortical covering of the brain. For the sense, as was shown above, is diffused not to one gland alone but from one into all the glands. Thus is the brain rendered a participator in every sensation, and so can judge of their differences.

There seems, moreover, to intervene also another and more immediate communication of the papillae of the touch with the cortical glands of the brain, besides that which we have named, which is rather a mediate one. For it can be demonstrated that these organic papillae are so many glands which imbibe a most subtle humour from the circumfluent air and ether, and carry the same by their emissaries even to the cortex of the brain. I have called these emissaries the emulous vessels of the fibre, or corporeal fibres, which weave together the inmost tunic of the arteries, and at length terminate in the cortical glands. To these they carry and supply this purest humour from which is elaborated the animal spirit. this manner these papillae, which are thus so many glands corresponding to the cortical glands of the brain, communicate with the corticous surrounding of the brain, whence comes the sensation of touch.

I wish also to add that these papillae or glands which furnish the sole of the foot with its acute sense of touch seem to be composed of those fibres of the brain itself which flow along the whole length of the medulla spinalis, even to its extremity, and finally go into the nerves; so that the sense of touch in the sole of the foot communicates more immediately with the brain than that of other parts of the body; wherefore this has a more acute sense than other parts, and a change of its state is at

once carried to the brain; and thus, also, in the bodily system are first and last things united.

(38.) The soul perceives most particularly every change which goes on in the whole body; and particularly and universally it encounters those things which bring any harm to the organic forms or to the body: but that we are not conscious of any other changes than those which affect the cortex of the brain in particular.

Whatever strikes a fibre runs to the beginning of the fibre, and as it were announces the change made in it. For every sense emerges or is elevated, as if from the heavier to the lighter, in being elevated to its origin. The origin itself is the cortical gland: for whether it be one of the brain or of the cerebellum or any gland of the medulla oblongata or medulla spinalis, there is a likeness of the gland in every minute portion of the fibre, just as there is a likeness of the heart in every particle of an artery. So is there a gland present, serving as a beginning, in every least part of its fibre; wherefore each part is rendered conscious of a change. There is nothing organic in the whole body which is not constructed from fibre and vessel; the fibre itself is the producer and the formative substance of the vessel: whence it follows that nothing changeable can exist in the whole bodily system as formed of fibres only of which the cortical gland or its soul may not be rendered conscious. But the cortical glands perceive otherwise than do the medulla spinalis and medulla oblongata, and those of the cerebellum otherwise than those of the cerebrum: the former perceive in a general and obscure manner, but these particularly and distinctly. Thence arises a sense which does not reach the consciousness of our intellectual mind. The cortex of the brain must be reached most particularly if it is to

perceive differences. From this it follows that unless the brain be affected in particular, we cannot be rendered conscious of changes. The sense of touch affects the cortex of the brain both mediately and immediately, as already indicated; likewise the sense of taste, of which presently. It is also evident from the mamillary process. which is affixed to the brain itself, that the sense of smell likewise affects it. The sight extends directly into the cerebrum by the optic nerve. Seeing, therefore, that the soul becomes conscious of all the changes of its body, and that sensation is passion, to which there is a correspondent action, it thence necessarily follows that the soul concurs with every change; for as it suffers so also it acts. Its natural force is such that the organism, the order, harmony, and form, which it has constructed it also preserves and protects; for the organs subsist from the same source from which they exist; they even subsist in the same manner. For the soul remains in a perpetual state of formation; and what is formed it regards as to be formed, and that which is to be formed as formed already.

V.

THE SENSE OF TASTE.

(39.) The Taste is a superior sense of touch, and discerns those figured parts or angular forms which are more simple, and which flow in a certain liquid.

In the tongue are contained papillae almost similar to those above described among the pores of the skin; but there is observed a threefold difference. Under the skin of the tongue itself, and under a certain nervous membrane, they lie concealed, but they stretch forth and reach out when the appetite is excited, and the mind desires to perceive the quality of meats and drinks. This is the reason why in the dead they are withdrawn and hidden. The outermost sheath is netted, pervious, and full of holes, in order that the parts which press and are rolled upon the tongue may be able at once with their points and corners to meet the membranes and little extended tongues of the papillae. This effect could not be produced unless the particulars which are to be discerned by the taste should be in solution, and flow in some liquid. This is the reason why the tongue itself and the neighbouring glands, as those of the whole mouth, or of the jaws and palate, pour forth a kind of saliva. For the dry tongue posesses only a dull and feeble sense, very much such as that of the touch only. That the sense of taste is a superior sense of touch appears from this, that the touch cannot be so far perfected that it can perceive the effluvia floating in moist places, and their little points, still less the order and arrangement of the angles among

themselves and as mixed with the rounded surfaces. For there are degrees of the angular parts or forms, as of the more or less composite or simple. Those which are composite are of that inferior, posterior and imperfect kind which the touch perceives; while the taste perceives those which are more simple, prior, superior and more perfect. But in general, it is to be observed that the three senses, touch, taste, and smell, do not take in anything more than the figures of the parts or of the angular forms, that is, of the inert and heavy; they do not take in the forms themselves and their essential determinations, as do the sight and hearing.

(40.) The sense of Taste is intermediate and truly corporeal; its innumerable organic substances are dispersed throughout the entire tongue, and taken together, constitute the organ of Taste;

as asserted and shown above concerning the touch: for papillae of diverse forms are scattered through the entire tongue and over its surface; but nevertheless, when taken together, these form but one organ and one sense.

(41.) The perfection of the sensation of Taste depends upon the quantity, quality, situation, and mutual connection of those organs, that is, upon the particular form of each and the general form of all, as also upon a certain variety which must be called harmonious;

just as said above concerning the sense of touch. The same law belongs to both. For the objects of both are figured corpuscles, hard and inert, but those which affect the sense of taste are the simpler or less composite of the

same kind, or of the angular bodies. As regards the variety of those organs, they are of a triple composition and nature: the more numerous, the softer, and more perfect are in the apex of the tongue; then those which are in the sides; then the more coarse and imperfect about the root of the tongue: thus there is a harmonious variety and difference of all. For the perfection of similar organs in the same tongue increases and decreases, so that there is nothing whose figures may not be detected by this sense.

(42.) The sense of Taste, just as the sense of touch, refers itself mediately and immediately to the cerebrum as its common sensory; immediately by the nerve of the fifth pair, which is the common nerve of the organ of the senses arising from the medulla of the cerebrum itself.

We must distinguish whether the taste arises from the nerve of the ninth pair or from that of the fifth pair, for everywhere it approaches and enters the tongue together with the nerve of the par vagum: but because the tongue is not only muscular and filled with motor nerves but also papillous and sensative; and because the fibres of the said nerves are wonderfully folded together in the tongue, so that it is difficult to know the office of each one; therefore we must explore the subject by the aid of other signs which may reveal the truth. It has elsewhere been observed that the nerve of the ninth pair is the speaking or locutory nerve, and that the nerve of the eighth pair the masticating nerve, and the nerve of the fifth pair the sensory nerve. So far as regards further the nerve of the fifth pair, it is the common nerve emerging from the annular protuberance in which are concentrated the fibres both of the cerebellum and of the cerebrum. This nerve is both soft and hard, according to the observations of Ridley, therefore both a sensor and motor nerve, as is the

nerve of the seventh pair or that of the hearing. Besides. it enters the several organs of the senses, the sight, hearing, smell and taste: thus it seems to serve the same use in the head which is served by the intercostal nerve in the cerebrum: as that, in other words, unites in its own mode the several senses, so this unites the several actions or muscles. It may be demonstrated from anatomy that the universal nerve of the senses is one which arises immediately from the cerebrum, just as that the universal nerve of the natural motions of the body, or the intercostal nerve, as also the nervus vagus, arises from the cerebellum. Moreover, many phenomena prove the nerve of the ninth pair to be the speaking nerve, or that of the muscles by the aid of which the tongue speaks, thus so far as the nerve of the fifth pair is continued from the medulla of the cerebrum or arises from its cortex, it follows that all the differences of touch in the tongue may be perceived in the cerebrum. It would be otherwise if there were no immediate communication with the cerebrum.

VI.

THE SENSE OF SMELL.

(43.) The sense of Smell is a still higher sense of touch, and discerns those figured parts or external angular forms which are still more simple, and which float and are borne about in the aerial atmosphere.

The organs of the sense of smell are scattered through the whole pituitary or mucous membrane, which lines not only the cavities of the nose but at the same time covers the walls of many of the cellules. Besides the cavities of the nostrils there are also the frontal sinuses, cut out between the tables of the frontal bone, as also the antra of Highmore, in the upper jaw; then the cellules of the cuneiform bone; and besides, there are caverns and spongy and labyrinthine spaces, which all communicate with the nostrils and are covered with a common membrane and periosteum. Through this membrane in the head and the widest spaces there creep myriads of vessels, and glandular and round corpuscles are interwoven in great numbers. There are six cavities of the sinuses and four cellules of the spongious bones, which communicate with each other, and are furnished and filled with similar organs or glands. This whole expanse derives its origin from the olfactory nerves; these nerves, called otherwise the mamillary processes, affixed to the anterior part of the brain, are attenuated around the ethmoidal crest, and are transmitted by certain perforated lamina called the cribriform or cribrous plate. It accompanies these fibres outward also, even beyond the meninx,

both the pia and the dura, together with certain arterial and venous vessels. From the description of the expansion and connection of this organ it is evident that it possesses a sense still more subtle, or of parts more simple, than does the taste. For those things which float about in the air are lighter and more and more volatile than those which are in the water and liquids which affect the taste. For in order that the taste may distinguish the figuration of parts it is necessary that the compounds be dissolved; but that the smell may perceive this it is not necessary that they be dissolved, but the very effluvia even from the bodies whether of animals or vegetables, as also those exhaled from minerals, are perceived [by this sense]. Thence are taken up those [particles] which do not permanently adhere to bodies, but which spontaneously are separated from them and fly about in the air. The effluvia of the animal kingdom are so copious that by the sense of smell alone dogs know their master from other men, and can trace out and hunt for animals. Still more copious and sensible are the effluvia of the vegetable kingdom, as the odours from gardens and fields. In the mineral kingdom, while many objects are inodorous, there are yet many which in a liquid form excite this sense. Hence the smell appears to distinguish parts more simple than those detected by the taste. But nevertheless, the forms here are angular, in themselves heavy, inert, hard, figured, truly corporeal and material.

(44.) The senses of Touch, Taste, and Smell perceive only external forms, but not internal forms, as do the senses of Hearing and of Sight.

The external form or figure of the parts, the angularity, pointedness, planeness, roundness, is perceived by the organs of the touch, taste, and smell, but not their quality or internal forms; for only the parts along the surface affect the papillae. And because these are inert

and hard they cannot be explored by these organs as to their internal structure, which is the reason why we judge of them from the taste and odour only, and may not know whether they are wholesome or not. Thus arsenic and poisonous substances may deceive by their sugary sweetness. Their internal quality can be learned only from their effects; from which knowledge comes the chemical and medical art. But it is otherwise with the hearing and the sight: by these senses the internal forms themselves are apprehended, but not the external forms; for these are modifications and fluxions which affect the organ according to their essential determinations; wherefore the law of the sense of hearing and sight is entirely different from that of the smell, taste and touch.

(45.) The sense of Smell affects the whole brain, every medullary substance of it immediately, and mediately the cortical substance; and the brain, whose form is harmonious, shuns whatever is contrary to harmony and seeks what is comformable to it.

The sense of smell insinuates itself immediately into the whole medullary substance of the brain, and by this diffuses itself; for as soon as the fibre of its sensory penetrates the cribrous lamina it is diffused into the mamillary process which arises close to the corpora striata, and carries its roots here and there through the whole medulla; for these processes in the niduli cavi when they are inflated expand the medullary substance and keep it swollen. The roots seem to be not so widely scattered in the human brains as in the brains of the irrational animals, lest, it may be, the odours should disturb the reasonings and judgments of the human mind by inducing so frequent changes in it. In so far as the smell is extended through the whole brain, it follows that every thing which injures the harmony of its parts and substances the mind is averse

to, and feels to be disagreeable and offensive, while other things are conformable. The most perfect form itself is that of the brain, namely, the spiral. Into this flow its cortical substances, and nearest these the fibres which thence arise; whatever, therefore, is inharmonious must disagree, whether it exists at once or successively. For that which is harmonious in itself does not tolerate the inharmonious, but perceives at once what it is which is repugnant to itself and to the order of its individual parts. Thus the smell appears to affect only the general form of the brain, but not the particular form of each glandule.

(46.) The brain or common sensory is not affected by the sense of Smell except when its fibres are in their diastole or expansion.

The whole medullous brain, or a single fibre of it, is expanded whenever the lungs are expanded, that is, whenever the air is drawn in; for the motions of the brain and of the lungs are synchronous. In every general expansion of the brain all its fibres are restored from their most compressed position into their natural or harmonious situation; therefore it is then only that the smell is experienced, as may be perceived by us when drawing in the breath. Moreover, the sense of smell returns when after sneezing the medullous brain is restored to its natural condition as to the fibres, that is, when there is no longer anything to prevent the fibres and glandules from being held distinctly apart.

(47.) Similar things to those observed in touch and taste are also to be observed in the sense of Smell.

For example, the organic substances of this sense are innumerable, and disposed throughout the entire pituitary

membrane, and, taken together, they constitute the organ of smell; the perfection of the sensation of smell depends also upon the quantity, the quality, the situation, and mutual connection of these organs or glandules, that is, upon the particular form of each and the common form of all, as, again, upon a certain variety, which is to be called harmonic. The reason is, because so many objects of the sense of smell are similar to those of the taste; for instance, as being figured, inert, saline, sulphurous, urinous, oily, aromatic, or anything whatever of the mineral kingdom, and angular and of terrestrial forms. But in the degree that this terrestrial form approaches more nearly to the circular, so much the more agreeable is the sense thence resulting.

(48.) The soul also perceives still purer bodies, and forms of a simple element swimming in a still higher ether; and it disposes its organism so that those things which are agreeable may be attracted and drawn in by the most subtle pores even to the cortex, and that by means of these the animal spirit or purer blood may be prepared; but we are not rendered conscious of the variety of these or those forms by any sense.

That the sense of smell may be wonderfully perfected and exalted appears from the animals which by smell and sagacity trace and perceive the friendly effluvia of their master, and the unfriendly effluvia of other animals, indeed often at an immense distance. But we human creatures take in by smell only those forms which swim in the air, while the beasts we have mentioned take in those which float in the ether. There is an ocean of these forms, as appears from phosphorus and innumerable other phenomena. For the atmospheres are filled full of exhalations, so that nothing shall ever be wanting, but rather

constantly at hand, in order that our blood—as well the red as the white blood—and animal spirit may be supplied with those things which should enter into its composition. Besides, there are the least little pores, now opened, now closed, now hungrily seizing and imbibing the wave of these [subtle forms], now rejecting and discharging them: or there are moments when our cuticle stands wide extended, and when it remains shut. Thence it is that various diseases both originate and are cured. This [porous action is called instinct, nor does it belong to the consciousness of our minds; because [these forms] are so subtle as not to affect the papillae or organs. This the soul has reserved to itself: nor will it reveal this by any sense to the mind, which might wish, with its will taking the lead, to administer this economy, in which case the whole animal chemistry would easily be overthrown and destroyed. Accordingly, this sense should be the most acute and pure of all the senses of touch.

VII.

THE SENSE OF HEARING.

(49.) The ear is the organ of Hearing, exactly adapted to receiving the modifications of the air.

We can be sufficiently instructed concerning the nature of the air's modifications from the formation of the ear, and also concerning the formation of the ear from the nature of the air's modifications. For the modified air is the principal and the ear is the instrumental cause, and so formed, one for the other, that there is not the least of the one which is not inscribed in the other. But a sagacious ingenuity, and one well furnished with knowledge, is necessary in exploring the nature of one by means of the other.

For the auricle itself or external ear, with its pinna or lobe, its helix and antihelix, tragus and antitragus, scapha, concha, liguments, cartilages, follicles or glandules, and muscles, is extended and spirally intorted at the first impulse of sound or modulation, so that not the least ray shall escape, but must be carried most aptly into the auditory passage. This passage itself, with its winding progress, its bony and cartilaginous substance, its tunic, cerumanous glandules, reticular body and hairs, is most perfectly adapted to induce the approaching and concentrated sound into the membrane of the tympanum, and at the same time to control it lest any damage should occur to this membrane. But the membrane of the tympanum is concave, of elliptical figure, placed obliquely, and composed of three membranes, the exterior one being

continued to the auditory passage, the interior into the vestibule. Even when perforated it adapts the sound received exactly to itself, and either widens itself and its own cavity or else relaxes. In the cavity itself of the tympanum are seen the ossicula, as the malleus, the incus and stapes, with their handles, connections, hinges, muscles, and cords. These clearly indicate that the least touches or forces from the outermost membrane are propagated to a certain interior one called the fenestra, so that there are as many most delicate pulsations as there are distinct sounds. But inwardly, or in the labyrinth and its vestibule, there run together three semicircular canals with their sonorous membranes; as also the cochlea of wonderful construction, with its spiral lamina, its nucleus, its little nerves, its periostea, and infinite other remarkable features, besides the two windows and the aquaeductus Fallopii. All these openly show that the organism of the ear corresponds exactly to the form of this fluxion of the air particles. And truly, so many wonders are displayed in this single stony, hollow, sculptured bone that it brings the most intelligent human mind into amazement. The artificially constructed acoustic instruments are more perfect in the degree that they approach more nearly to what is exhibited in this natural knowledge.

(50.) To each mode or ray of sound there belongs its own force, and the difference of forces produces differences of sound, for receiving and transmitting which in the most distinct manner the ear is formed; therefore the Hearing is also in a manner a sense of touch.

From innumerable indications, as also from the organic apparatus of the hearing or of the ear, it is plain that the modification of the air acts by forces, or that there are as

many forces or most delicate blows and touches as there are sounds. In the ear this is evident from its membranes and fenestrae, from the malleus attached to the membrane, and from its fold and pit in which it hides itself, as also from the incus and stapes and their articulations, which indicate plainly that there are as many differences of sound as there are pulsations. The same truth is also confirmed by innumerable other phenomena of sound; as that a sound increased puts forth such a force against things in its way that it violently displaces them, and will break glass. I have heard that from the mere crash and sudden sound of exploding powder in a ship which was rent in pieces and burned, as also from the same in a tower or magazine, the roofs of houses have been lifted, tables overthrown, windows broken, and bodies displaced by a very strong impelling force, besides many other results which plainly show that in sounds there resides a force greater or less according to the degree of its intensity, and that therefore the difference of forces produces differences of sound. Besides these there exist innumerable other phenomena which prove the impulsive force of sounds.

(51.) The differences of forces, impulses, or touches constitute in themselves a certain harmony which is called the form of modifications, whence results the form of sensations, or sensation itself, concerning which nothing can be predicated until its differences are analogically compared one with another.

This appears in musical harmonies, which may be compared with numbers and the ratios and the analogies thence resulting; for a sound cannot be said to have a quality without some other sound as a companion or spouse, but it becomes a something by this relation to and comparison with another. The very rays or modes

of sound which differ in their force at once make harmony or disharmony in combination with others, thus they acquire a certain quality, because they are such relatively. Hence arises musical harmony, and this is the reason why variety is an attribute of nature, and why the perfection of nature lies in being harmonious.

- (52.) From sounds and their differences combined arises harmony or disharmony, which is the form itself of the modifications, and which is presented either agreeably or disagreeably in the organ of hearing.
- (53.) Harmony and disharmony are something that refers to the organism of the ear itself and its communication with the brain and the harmonious variety that exists in the sensible parts of the brain; as also something that respects the form of the cortical gland; or the quality of the animus and especially the quality of the mind. The harmony of sensations in general, and especially the sensation of hearing, is determined by the state of this last, which is the reason why the same harmony is not equally pleasing to all, but that what pleases one may displease another. Nevertheless, there is a harmony more or less perfect naturally; but the states above named are a reason why harmonies most perfect or truly natural may yet be perceived as inharmonious.
- (54.) The sense of hearing is more excellent and perfect than the other senses, namely, the touch, taste, and smell, in this respect, that the hearing perceives the very forms or essential determinations of objects; but the touch, taste and smell only the external forms or figures, and indeed those of the harder parts; so that the hearing is able to penetrate into the inmost essence of a composed sound or harmony, but not the inferior senses, which can take in the external but not the internal quality.
- (55.) The hearing is indeed an external and corporeal sense, but it contributes especially to the human intellect. For every word which is a composed and variously articulated sound signifies some one idea of the mind; but

the ideas are connected in such a manner that thence some rational form results which could not result except from material forms composed and connected together after a rational and analytic manner. Also the more intellectual the ideas the more the ideas ought to be analytically composed, from whose ultimate results and products the mind makes its inductions and conclusions as to what lies hidden within them. In this way alone do we approach the pure intelligence of the soul, which at length receives only the inmost sense of the words, and indeed, at last, a sense so inmostly hidden that it cannot be expressed by any word or circumlocution except most obscurely. Then the spiritual or angelic speech, or the universal philosophy, takes it up; and the perception alone of these truths in their mutual relations is a harmony most perfect and divine. Such is the proper speech of the soul.

- (56.) The hearing, viewed in itself, is an inferior sense of sight; for the forms which are represented by articulate sounds or words, pass over into those images which belong to the sight itself. So that we contemplate things heard as if they were things seen, before they are changed into rational or intellectual ideas. These, nevertheless, do so agree that there appears manifestly a certain affinity between the two, only a difference in perfection intervening as between the modification of the air and that of the ether, or between the air and the ether, which agree in general but differ in particulars; or such as is the difference between the superior and inferior things of nature, between the prior and posterior, the simple and the composite, the more perfect and the more imperfect; or between principles and causes, and between causes and effects.
- (57.) The hearing and its form of words does not pass over into a certain superior sight by mode of analogy, or the form of the hearing does not naturally excite a similar form or harmony of sight, that is, an image or

idea; but the mind, being instructed in the meaning of the words, concurs, and thus from use and at the same time from its own intelligence it understands the words themselves and the forms connected in speech, or from these it draws forth some rational meaning. Thus the sound by no means excites anything rational in the mind; but the forms themselves of the words, which are so many ideas of the mind, give the intellect the means whereby it may draw thence [from the sound] something rational. That the sounds themselves are unable to produce anything intellectual in the mind appears from the the vowels, which [in sound] are almost entirely different in one language from what they are in another.

- (58.) Meanwhile animals, not being furnished with intellect or with a rational mind, are entirely unable to produce any rational speech; for as is the soul such is the mind and such the speech. Speech, therefore, clearly indicates that we enjoy a superior kind of soul, more intelligent and more perfect than that of brutes.
- (59.) The speech of brutes is wholly corporeal and material; in general signifying the affections of their mind, which retains a great affinity with their interior sense. Such speech, which is to be called natural and general, is also interspersed in our own; indeed, we possess many words which by mere variation and nature of the sound signify and express in a sufficiently natural manner a certain affection itself of the animus.
- (60.) The ear, which is the organ receptive of sound, applies itself most particularly to its reception, and without this application the mutual discriminations of sound could not be felt and perceived; thence the ear undergoes and induces upon itself as many mutations of state as there are differences of sound, as appears from the applications of the malleus, incus and stapes; wherefore each organ must have a separate force and one acting of itself, just as it is also passive and inflated, as in all the other organs.

- (61.) To every sensory organ there must be supplied motory and sensory fibres, and sensation could not take place if either the one or the other were wanting, and unless there were some action which corresponded to passion or sensation. The action of the organ arises from use and from its nature, and indeed from an unconscious intellect; thence the motory fibre of the organ seems to be moved from the cerebellum, but the sensory fibre from the cerebrum. Thus the cerebellum and the cerebrum seem to reign in every sensory organ.
- (62.) Every sound induces a marked change of state upon the brain, and moves every particle of its medullary and of its cortical substance as well as of both the meninges; yea, sound sets into a kind of trembling the cranium itself, its parts and fibres, and those of the whole body; and so the whole bodily system is rendered receptive of the forces of sound.
- (63.) A sound vibrates and causes to tremble, each by itself, the parts of the cerebrum, the cerebellum, and either medulla; but the cortex itself of these [parts] is caused to vibrate only in a general manner, since sound and its harmony may not be able to carry the change of state to the cortex itself in a particular manner; but the cortex, from the general change of the state of its cerebrum, may take notice, and indeed from experience [learn to detect] what such mutation signifies.
- (64.) The hearing and speech, in finding their way through the brain and all its parts and moving these, flow according to the form of its substances. This is the reason why the brain perceives the harmony of sounds. This is recognized as being similar to its own general form, or the site and connection, order and form of its parts.
- (65.) The hearing in a wonderful manner clarifies, purges, and restores to order the brain, cerebellum, and the body itself and its viscera; yea, many things which otherwise would harden and collapse are thus restored; and in its own way it draws forth the animal spirit that

it may enter into marriage union with the blood, even from the brain itself, through its sinuses into the jugular veins, and from the jugular veins into the heart; hence it contributes something to the animal life. For speech and its sound is a kind of trembling, which pervades both liquids and solids. This is the reason why the ear is formed in the petrous bone, and that its nerve passes over that part of the skull where the sinuses come together, and that the [animal] spirit itself passes through the pores of the skull.

- (66.) Differences of sound can neither exist nor be distinguished unless there be a certain common sound not discriminated or articulated, in which and under which the particulars can be discerned; not otherwise than is the case with the sight, which also cannot exist without a common light, in respect to which all those things are discerned which are more or less luminous. Such a sound is furnished by means of the whole skull, which is the reason why the ear is inserted in the stony and most porous bone. It is also on this account that musical instruments are the more distinct, perfect, and sonorous in the degree that their strings are attached to a board and table of a more tremulous substance, for this furnishes of itself a common sound; but this common sound, like the light itself, is not perceived in the sound of the particulars.
- (67.) The hearing communicates immediately with the cerebrum by the softer nerve of the seventh pair, which probably arises from the medulla of the brain; but its harder portion communicates with the medulla of the cerebellum, from which it seems to originate. Hence it follows that the ear is adapted to receiving sound by the harder nerve, but for catching the meaning by the softer nerve, each being distributed throughout the sensitive membranes, cylinders, and spirals of its vestibule.

VIII.

THE SENSE OF SIGHT.

(68.) The organ of sight is the eye, set in its own orbit, globular in figure, in color black, brown, grey, bluish grey, or blue. Not to mention the eyelashes and lids, the eye itself is provided with six muscles for motion, the names of which are the attollens and the deprimens, the abductor, the adductor, the superior and the inferior oblique. The tunics, the humours and vessels constitute the bulb itself. The tunics are many. The albuginea. which is also called the adnata and conjunctiva, adheres to the front part, and joins the eye to the orbit. Next is the cornea, which is pellucid and divided into layers. The third is the sclerotic, hard and opaque. The fourth is the choroid, black in man, and consisting of a double layer; the fifth is the uvea, which is the front part of the choroid, perforated and coloured, visible through the cornea, convex, in which is to be seen the iris of various colours; the pupilla which is the round opening almost in the middle of the iris. The posterior face of the uvea is black. Besides these there are to be seen the sphincter pupillae for contracting, the ciliary fibres for dilating, the ciliary or annular ligament for the movement of the vitreous body and crystalline lens, especially the arterious and venous circle and the ductus nigri. Then the retina, a very delicate tunic, glistening, somewhat mucous, an expansion of the optic nerve around the base, and the primary part of vision. The humours are the aqueous, or albugineous, filling either chamber of the eye in which the uvea freely floats as it were, and which is continually replenished;

the vitreous, probably consisting of the most subtle vessels or cells, filling the back part of the eye contiguous to the tunic of the retina; the crystalline, almost lens-shaped, more solid than the rest, called the crystalline lens, enclosed by means of a most delicate tunic in the pit of the vitreous, freely suspended as it were just behind the pupil, and moveable by means of it, composed of many pellucid layers and thus resembling an onion. The arachnoid vascular tunic, surrounding the crystalline and vitreous body; the optic nerve completing the retina enters the eye from the side of the nose. Besides these there are the nerves of the third, fourth, fifth and sixth pairs.

- (69.) The eye is the organ constructed for the reception of the modifications of the ether, just as the ear is for the reception of the modifications of the air, so that from the structure and form of the eye we may learn what is the nature of the modifications of the ether, and conversely, since one corresponds to the other as the instrumental to the principal cause. The correspondence appears to be such that the eye could not have been otherwise formed than it has been, in order to receive every difference and variety of the inflowing modes to apply these to itself and transmit them to the common sensory.
- (70.) The soul desired to furnish her body with sight in order that by this means she might take in every variety of the visible world placed beneath her and the sphere of her regard. Without this sense these would not come into her knowledge. Thus only could she provide for the body and guard against threatening danger, these being the universal end of all sensations. Moreover, she would perfect the intellect or the rational mind by a posterior way or through the senses, especially that of sight. Besides these ends there are many special and particular ones.
- (71.) But the sense of sight, although it is supreme and the most perfect of all the external sensations, still is so feeble that it can contemplate only the ultimate effects of nature or their external forms and figures; and

infinite things still lie hidden from her and escape her view, while only a very few are revealed, and indeed these very obscurely and indistinctly, and as if of a continuous degree. This is the reason why interior things and the causes of bodies and of objects are to be investigated by the experience of many centuries, and indeed with the aid of those sciences by which the intellect is rendered acute in its more interior penetrations.

- (72.) By means of the optical art, or of microscopes, we have detected how infinite are the things which escape our ocular vision, since even the smallest insects, whose shadow we can hardly perceive at all, or but as the merest point, still appear to be provided with their nerves, vessels, blood, heart, brain, medulla, muscles, organs of the senses, of nutrition, and generation; and that the globule of red blood, hitherto hardly visible, contains the infinite parts; and so with many examples. From these we may conclude that even these parts which are the ultimate objects of microscopic vision also embrace in themselves innumerable smaller parts, even a whole system, so that nature in the least parts still lies hidden far beyond our optical experience. But we are gifted with a certain internal vision, or imagination, which penetrates still farther into the forms of things presented; while the inmost sight of all penetrates even farther. So also in regard to distances: while our hearing extends to a moderate distance our ocular vision extends respectively to one that is immense, as even to the sun and the stars; and the rational mind by its vision reaches even beyond the stars; while the soul, which is intelligence itself and pure vision, is not limited in its cognition by anything narrower than the created universe. For if such a difference exist between the perfection of hearing and that of sight, what must it not be between the sight and the intuitions of the soul when left to itself.
- (73.) We may conclude that the sight of the smallest animalcule is much more acute and penetrating than that

of the large animals, so that they can discern parts which we can hardly distinguish even by means of the microscope. Hence the smallest points of our vision are regarded by them as entire masses or orbs, upon which they walk, in whose pores they hide themselves as in caves, and from the least particles of which they seek their nourishment, and there lay their eggs and hatch their young. This seems to be deducible from the natural necessity of their life and their nutrition, and likewise from the small diameter of their eyes.

- (74.) And because our mind is unable to judge of objects except by means of the eye, it judges of their figure from the variety of the light and of the shade, of the magnitude and the mass from the distance, of the form from the motion. Also it judges of the harmony from the pleasure with which the sight or animus is affected. In these nature herself vastly exceeds art. Hence it follows that the mind, judging from the sight, is liable to be greatly deceived, when that from which it forms its judgments concerning objects is obscurely revealed. For the sight is the servant and messenger of the rational mind, which it informs regarding the visible world and its variety.
- (75.) There are as many most delicate pulsations and touches as there are luminous rays, although these appear as nothing when compared to the rudest sense of touch, as do also the modifications of the air; and yet without touch nothing is affected. The more luminous and intense the ray the stronger it is; the less luminous the less force of acting it possesses; and shade itself possesses none. How many forces there are in the solar rays appears from their effect, whether from heat or from the irritation of the membrane of the nose to sneezing; also from the reflection of visible things from the objects and figures into the eye, and from the phenomena of refraction; and innumerable others.
- (76.) The images which produce the sight of the eye are evidently only variations of light and shade, or of the

stronger and weaker forces variously mingled together. Hence arises an image, or a visual figure and object. Colours themselves are nothing else than variations of light and shade, or rather of white and black made bright with luminous ravs. The analogy itself of the light and the shade, or of white and black lightened up with rays, and thence the external form and harmony, are what produce the coloured figures. Also a greater proportion of white than of black becomes so much the more yellow even to red, which partakes equally of both; the greater proportion of black becomes the more green and cerulean; and so on. The ratio itself produces the colour, but the form and harmony produce the splendour and the beauty, while the harmony of the colours among themselves produce the delight of vision.

- (77.) No image can be represented to the eye without the common light, under which it is and in which may appear both what is more or less luminous and what is shadowy; thus in the darkness the sight vanishes, in twilight it is feeble, in mid-day it is clear.
- (78.) Every vision, object, or image induces a change of state in its sensory, and of itself the eye disposes itself to every quality of its object; there is therefore in the eye an active or an action which corresponds to the passive or sensation. This appears from the structure of the eye itself, and from one's own observation whenever images flow into the eye: from the structure, for the pupil is moveable by means of the crystalline humours, and that it may be moved actually toward every variety of object it is provided with the sphincter, fibres, and ciliary ligaments; even the crystalline humour is itself composed of many layers, and the uvea freely swims in the aqueous humour, and the aqueous or albugineous humour is perpetually replenished; thus the eye wonderfully adapts itself to apprehending every object by the changes of its state.
- (79.) The changes of state of the eye are general as well as special and particular. In general the position of

the eye is changed with respect to the position of the object, which is done by means of the six muscles. Then also it obscures itself in part by dropping the lids, and by elevating them it admits the entire inflowing of the object. In special change the position of the pupil is changed; in particular, all the least particles composing the humours both aqueous, crystalline, and also the vitreous [body]; for this is thought to consist of most subtle vessels and cells; besides the retina itself, which distinctly receives all the inflowing forces.

- (80.) Visual objects induce also a change of state by the several fibres of the optic nerve, as also by the several fibres of the medulla of the brain, and finally by the several cortical glands. For the same force which is borne in to the vitreous humour and the retina is also communicated by fibres, thence extending even to the ends of the fibres; but a change of state induced by these forces is lighter and more subtle than the changes produced by sonorous forces or those of hearing.
- (81.) The visual rays endeavor to reach, not some particular cortical glands, but the whole cortical covering or all the glands universally. Thus there is not a gland of the brain which is not rendered conscious of, and concordant with, some one visual ray. So with every fibre. For the optic nerve, after its meeting with its companion in the greater ventricles of the brain, expands into two swellings, which are called the thalami of the optic nerves, or the posteriora crura of the medulla oblongata. These thalami communicate with every substance, medullary and cineritious, of the whole brain. For it adheres and rests upon its most posterior lobes and borders. But the fibres of the lobes of the upper brain, as also of the vertex, are concentrated into a kind of fixed medullary cylinder which is called the basis fornicis, and thence for the most part they spread themselves over the thalami of the optic nerves. Thus the whole brain, both medullary and cortical, is rendered a participant of the rays of sight.

- (82.) There is no cortical gland which does not represent a kind of internal eyelet—or a semblance of an eye,—since the gland is in the last terminus of the fibres, and thence of the modes and the rays of both the sight and the hearing.
- (83.) Visual rays of images of sight induce a change of state both internal and external in every cortical gland, just as the sonorous modes of hearing do in the whole brain; for the cortical gland is a brain in miniature, and receives the sensation of sight just as the entire brain receives that of sound.
- (84.) The visual rays and their figures and forms or images run over the cortical gland and its surface, and bend themselves according to its most perfect or vortical form, and their bending and changing is communicated to all the fibres and vessels which compose the gland, thus to the whole gland itself.
- (85.) But since the cortical gland adapts itself still more perfectly than the eye for receiving every variety of visual objects, by its own power it induces a change in itself, taking another form, and one agreeing with the inflowing image. This change, which is the action of the mind itself or of the soul, corresponding to the sensation of sight as passive, produces that which is called the idea of imagination, and which is a part of the memory, because it is reproduced as often as the gland again assumes the same condition.
- (86.) In this way the images of sight produce and perfect the imagination, which is the internal sense of sight; not, indeed, that the visual image induces this change itself, for the gland is only passive to the shock of the rays, but that the gland itself concurs actively from its own interior potency. So is brought about a correspondence that such a change of state corresponds to such an image. Hence it results that if the imagination is strong and is intent upon one object, or if there be a thought [in the mind] from which flows forth an interior active power,

that the images of sight strike the common sensory only in the lightest manner, and are only very obscurely perceived, so that the visual image induces only a certain superficial change without any essential change of state.

- (87.) All words which are heard are also seen; all images which are seen are also perceived and become ideas; and all ideas which are perceived are also understood; whence come rational or intellectual ideas: in this way objects of the external senses pass over into objects of the internal senses.
- (88.) The passage of rays or modifications of the ether is made in a spiral form, as that of the modes of sound in a circular form; and the fluxion of the medullary and nervous fibres is also spiral. Therefore the visual rays flowing in from the surrounding ether, through the eye and its retina, upon the fibres of the optic nerve, in a fluxion of similar form, flow by an easy and spontaneous force even to the cortical glands. But in the cortical gland they are elevated into a certain superior or cortical form, while indeed folding themselves around its surface and texture, and this form is the vortical.
- (89.) The cortical gland, by virtue of the soul which resides within it and is its order, law, truth, and form itself, feels whether the image, simple or composed, be an harmonious one. What is harmonious agrees with its form, which the image traverses; but the inharmonious disagrees, for it forces, injures, and endeavors to destroy the site, nexus, order, form, in a word, both the external and internal state of the whole gland; whence results aversion, horror, and whatever is unpleasant, cheerless, even to sadness.
- (90.) The human race is wanting in an interior sense which brute creatures enjoy, as instanced in their sense of place, or that which makes them to recognize where a certain place is and thus to learn by what way to return home and regain their accustomed meadows and streams. They know this notwithstanding they find

their way by an entirely different path and one which had never been trodden or scented. Thus they are like living magnets. Such a sense arises from the form of the cortical glands themselves, which form is vortical, and cannot be excited by the fluxion of substances without a determination of the poles and of the larger and smaller circles, such as is seen in the great system. But man is wanting in such a sense, because of the intellect or our possessing a certain higher perception which induces an activity in those glands, so that the sensations of sight may be rightly perceived. This intellect is not pure, but mixed, hence it does not attend to the slightest motions of the objects of sight, and it governs the state of its gland from its own will, and not from nature or a natural intelligence. Therefore it can not be otherwise than that such a sense is wanting in man while it is enjoyed by those brute creatures which are not possessed of such an intellect.

IX.

PERCEPTION, IMAGINATION, MEMORY, AND THEIR IDEAS.

- (91.) Words which are heard are as it were instantly seen, for words represent so many forms, quantities, qualities, movements, accidents, which are usually objects of vision. But whatever is seen is also taken in by a certain interior sight or imagination, that is, it is perceived. Moreover, whatever is perceived by the imagination is also understood by man. Thus modes of sounds or of hearing pass over into images of sight, these into ideas of imagination which are also called material ideas, these again into the rational ideas or into so many reasons, from which, analytically connected, arises the intellect. Such is the progress of sensations from external to internal, and hence we may discern their differences.
- (92.) The imagination is therefore an internal sight, which corresponds to the external; for the eye is only the organ and instrument of vision, the genuine vision itself residing in the brain, or in the common sensory. When this is injured or disturbed or obstructed, the eye no longer sees; while on the other hand the image itself, which was present by daylight, is resuscitated when the eyes are closed, or during sleep, as though it existed in the eye itself.
- (93.) The parts of the external sight are called images, but the parts of the internal sight are called ideas, by some, indeed, material ideas, since they are not represented as unlike the images of sight except that they are disposed in a different order and connection. What this difference is can be seen from illustration alone.

- (94.) The external sight contemplates only the figures of objects, as, for instance, one wall of a palace after another, the roof, tiles, foundations, chambers, pictures, tapestries, thrones, and the dukes and ministers who dwell there: but the internal sight observes at once all these things which to the eye are presented successively, or during the passing of time. The external sight beholds in a city one house after another, squares, streets, temples, monuments, its legislature, its inhabitants: but the internal sight sees these several things all instantaneously, and not in succession. The external sight beholds the whole starry heaven, with its sun, stars, planets, moons, meteors, clouds, and their phenomena, contemplating one after another; while the imagination comprehends them all simultaneously; so in other instances. Thus the external sight takes in only one part of the several objects after another, while the internal vision takes them in simultaneously, so that in a moment it may traverse a palace, a city, the starry heavens, and contemplate in one compound idea that which was presented to the eye in its particulars. Thus the total complex of the one differs infinitely from that of the other, so that something infinite or perpetual as it were is superadded, as contributing a superior form in respect to that immediately below it. Hence it follows that the internal sight or the imagination is in a degree proportionately superior, prior, interior, simpler, and more perfect than the external sight.
- (95.) From the organs themselves of the external sight we may also conclude that the imagination or the internal sight is in a degree proximately superior and more perfect. The organ of sight is the eye, while the organ of internal sight is the cortical gland, especially of the brain. This cortical gland is an eye or a brain in miniature, but still it is an organ of a higher degree, for its form is vortical, according to the description given of it, hence it is of a purer, more perfect, and simpler nature than the form of the organ of sight, whose rays and modifications are

directed into the spiral form, which is next below the vortical in degree.

- (96.) The internal vision or the imagination exists in the cortical glands, and indeed in these separately, so that each one of these is a part or a symbol of that sense or the imagination; the harmonious variety of the glands causes that there is no difference in any object which is not in turn comprehended more distinctly in one of these glands and more obscurely in another; for the more eyes there are so much more distinct is the sight; consequently the more cortical glands there are so much the more distinct the imagination. Moreover, the common cause of all perfects the parts themselves, so that they shall all conspire to the common result.
- (97.) The images themselves of the sight are elevated along the fibres of the optic nerve, even to all the cortical glands of the brain. Reaching them, they run through them with the greatest rapidity, pervading even their whole fibrous and vascular structure by a kind of most subtle trembling, so that the whole gland is rendered conscious of the image and phenomenon of sight. The gland which is the organ of internal sight or of the imagination, adapts itself at once most perfectly to receiving its object; far more perfectly, indeed, than can the eye or the organ of external sight. Thus the gland undergoes a change of state which very nearly corresponds to the inflowing image or object, for it either contracts or expands, or assumes a more perfect form, or distorts itself into one more imperfect, since the entering of what is harmonious exhilarates and expands the sensory, while anything that induces discord binds and distorts, entirely as in the fibres and organs of touch. This change itself, which the gland receives, and to which it adapts itself at the impulse of any visual image, is called an idea. It can no longer be called an image, since it partakes of a certain superior and more perfect form as well as of intelligence. In this way the visual image is converted and passes into the correspond-

ing idea of the imagination, or the external and inferior sight into that which is internal and superior.

- (98.) From these things it appears that a certain natural correspondence intervenes between the imagination and the ocular vision, since that which is harmonious naturally expands the organ and restores it to its most perfect form, while the inharmonious compresses and distorts it into a form less perfect. This takes place by infinite modes, according to every quality of the object as regards its possessing a perfect or imperfect form.
- (99.) The object or the image is perceived as soon as it strikes upon these little sensories, or the cortical brain. This subtle vibration, trembling, and first change in the aforesaid glands, produces what is called the sensation of sight; since sight does not exist in the eye, but in the common sensory. For when the modification pervades both the gland itself, inducing in this the most perfect form, and at the same time the simple fibres, which are so many intellectual rays of the soul, it cannot be otherwise than that whatever touches and in an instant traverses these several fibres should be felt. But this sight is superficial, and cannot yet be called perception.
- (100.) But we have first to learn what sight probably is, and what is perception, imagination, memory, image, idea; as also what their differences are. At the outset it is to be observed that these all are effected in the cortical substance [of the brain].
- (101.) Whenever those variations of the modes or modifications of the ether which consist of the differences of light and shade, or of black and white, whence the colours arise, strike upon a little sensory [of the brain], then sight exists. The variations quiver over the surface, and through both the medullary and cortical, the fibrillous and vascular substances, and they dispose the little sensory for receiving a modification similar to their own. The sensory does not enter into other states, but it remains simply in the state agreeable to that which flows

in. Then it is that sight arises; and its changes in this little sensory, or brain in least form, are only such as conform to the object of sight. The parts of sight are called images and objects.

- (102.) But the imagination comes into play whenever the sensory undergoes diverse states, even while the first state is still preserved, which is the state of the object and the common state, and basis as it were of the remaining states. Thus, while other states are passed through, they all have a bearing upon this first, or one common to them all, and to this they are all related and assimilated. For there are innumerable states possible, both universal, special, and individual; and under every universal one there are infinitely many singular ones, or in one general state there are infinite particular states which are called its single parts. Nor can they do otherwise than contribute their share to a certain general form, since they subsist under a general form which they help to sustain.
- (103.) The parts of the imagination are not called images, but *ideas*; for taken together they contribute a certain form which approaches the rational, while yet it is not the rational. Into the imagination enter only those things which are similar and in agreement, and these are all particular ideas; from these arises a compound idea, which again is, as it were, the part of an idea still to be composed.
- (104.) When the imagination is in action then the external or ocular sight ceases, or recedes from it, for the object of sight then only remains as forming a common basis of the other states; and by turning it about, those which have affinity with it are gathered in and brought together. Thus the imagination is stronger when the eyes are closed or in the dark, and feebler in an intense light.
- (105.) When the imagination so operates that by a nexus of similar things a desired order is obtained, or seems to be discovered, and there is the recognition of what is in agreement, this state is called *perception* or

internal sensation. For that is perceived which is seen, or is taken in by the sense; and yet the concurring of many more things is requisite to perception, by whose aid the quality of an object is known.

- (106.) Memory is all that which is produced by the imagination, or it is the mutability of state itself. For the sensory itself possesses by nature nothing but a potency of changing its state; but that it assumes various states is the result of sensations which constrain the sensory and by a kind of force bring it into these changes. The particular mutation thus acquired remains, and its quality is known by the images impressed. Hence a particular mutation which exists in potency is a part of the memory, while a particular mutation which is in act is a part of the imagination. Therefore the ideas of the memory are the same as the ideas of the imagination, but they are not reproduced except by an actual mutation; hence the imagination may in a certain sense be called the active memory.
- (107.) These changes of state are to be acquired by use, culture, custom, in the flowing-in of sensations. Thus the sensory itself becomes accustomed and learns in time to undergo many changes of state, and thus to enrich its memory. Every mutation, once acquired, remains under the name of memory, and continues present whenever the sensory returns to that same mutation.
- (108.) From these observations we may now conclude what the imagination is, and what the memory, and the idea, and also in what manner the sight passes over into the imagination, and thus what is their relation.
- (109.) The brute animals, however, are born not only into their natural memory, but into their imagination, or into the mutation of the state of their sensory. For they are possessed at once of the perfect sensations of their members and with their powers of acting.
- (110.) It follows from the foregoing principles that there can be no idea of the imagination which is not in

the memory, and no idea of the memory which has not been in the sense; hence that all parts of the imagination are insinuated through the senses alone. Consequently that there can be just so much imagination as there is memory, and so much memory as there is experience of the senses.

- (III.) But inasmuch as the order of similars, their harmony and their form, does not depend on this sensory, but on a higher and a pure intellect, it follows that something more than memory alone is required for the imagination. For it is not owing to the memory that those ideas called forth are rightly put together. This is rather the result of the pure intellect itself, or of the soul, whose nature it is to understand the harmonies and order of things. Hence the imagination is such as the communication of the pure intellect with it, or in other words, the imagination can exist so far as there is a communication of the pure intellect with the ideas of the memory. But we will speak further of this subject when we come to treat of thought.
- (112.) Such an arrangement in order of the parts of the memory does not come from the senses, but from the pure intellect, and thus from the soul, which is the order, the love, the truth, the law, the rule of its own system. But we confound this order with the ideas, or the determination and order of parts with the parts themselves. And from our observing that the order is natural or inborn, we believe that the ideas themselves are inborn also.
- (113.) The pure imagination is nothing else than the power of comprehending and embracing at once all those things which are obvious to the senses, and which inhere in the memory. This, in a measure, belongs to brutes; it is exercised by somnambulists, and by children whose imagination is not yet well directed or ordered by the pure intellect.
- (114.) There appear, nevertheless, to be rational and intelligent beings who speak from memory alone, or from

experience, or from the knowledge of others, and without a proper intuition of things in connection and orderly arrangement. These seem to have an intellect to those who do not know the various parts themselves [that go to make up this faculty], as to what they are or whether they exist or not, or to those who still less know how to combine ideas into the form of the true imagination.

- (115.) The imagination is the more perfect in the degree that any one can reproduce the more ideas from his memory, and at the same time the more similar and harmonious ones, and from these glide into the field of other ideas, and so change these common states into similar or other common ones, and choose out the parts of each and dispose the several ones into their fitting forms, so that there may be produced a composed idea such as will agree with the order of nature. If anything contrary to the order is admitted, then there is a defect and irregularity, a weakness, resulting either from ignorance or from inability to change the states or to reproduce ideas, to rightly co-ordinate and subordinate these. Or it may arise from a failure of the pure intellect to communicate with the ideas of the memory, or from many other causes.
- (116.) No speech can originate from imagination alone. To this both intellect and thought are requisite; for there is in every composition of words something intellectual, analytical, and philosophical,—yea, spiritual.
- (117.) Every imagination at once ceases as soon as the cortical glands are deprived of the faculty of undergoing their mutations; as when they grow cold and are relaxed as in certain diseases, in catalepsy, in morsus tarantulae, in Vitus' dance, and in loss of memory. The glands are deprived of this faculty when the blood is obstructed, either by the relaxing of the vessels or by something that hinders its return to the veins and sinuses. When the fibres relax the glands lose their tone, adhere to those next to them, and become thickened with the more sluggish flow of humours.

- (118.) The internal state of the sensory, indeed, depends on the determination of the simple cortex, and of the tender fibres of its vessels, of the meninx piissima surrounding it, of the follicle itself, and humour flowing through. But the external state of the sensory depends upon its connection with others near it by means of the very delicate fibrous threads and by the arterial ramifications, in general by the pia meninx, from the insertion of the vessels and the production of the fibre. But the external state, or one still more remote, depends upon the arterial vessels of the brain, the quality of the blood, upon the liquids outside the vessels, upon the furrows and chinks between the cortical masses, upon the connection of the medullary substance, upon complication and tension, upon veins, sinuses and the dura mater, upon the form of the whole brain and its connection with the cerebellum.
- (119.) The qualities of the memory and those of the imagination are most diverse, for there are as many varieties as there are people. There are those who are of quick memory and imagination, and those who are slow; those in whose memory objects are most firmly held, and those in whom these are suddenly dissipated; also there are those who can recall acts after a long time. Yet we are not able to examine thoroughly the causes of every variety unless we know rightly the internal state of the cortical glands and the more perfect forms. The reason of all can indeed be given, and confirmed by the phenomena of experience; but here it will suffice to touch only upon the generals of the subject. From what is related above it is evident whence these diversities have their origin.
- (120.) The imagination vacillates, is intoxicated, becomes insane, according as the animal spirit and purer blood which passes through the little sack of the gland is obstructed by heterogeneous particles, punctures, and things disagreeing; for then the gland within is punctured and stimulated into other states than those which are induced by sensations; thence is inebriety or inebriate

insanity. Whether such influences or touches occur from within or without, still the gland is disturbed out of its own natural order.

(121.) Those inclinations into which we are born also take their origin from thence. For instance, that we are born poets, musicians, architects, mechanics, or whatever else, depends more upon the imagination than the intellect; for there are persons whose little sensories incline and are more easily adapted to these than to those changes of state, and by a natural leading more promptly seize and reproduce one set of ideas than another. This depends upon the form itself of the sensory or gland, while the form is dependent on the simple cortex; and this depends on and springs from the soul.

(122.) The internal sight is most acute, and resides in the top of the cerebrum, for there the cortex is most distinct and is surrounded by the most frequent chinks, so that it can be disposed for assuming every mode and every state. It is not so elsewhere in the cerebrum, still less in the cerebellum, where the sensations are common and accordingly indistinct. For a universal without the distinct powers of the particulars is obscure; and of such action imagination cannot be predicated.

Part Second.

THE INTELLECT.

X.

THE PURE INTELLECT.

- (123.) Before we treat of the mixed intellect, or of thought and our rational mind, it is necessary to treat of the pure intellect; for thought is as it were a middle bebetween the pure intellect and the imagination, and in a certain manner draws its essence from both; for the priors and posteriors, or the extremes which enter on both sides, are to be explored in order that the nature of the middle or the mixed result may be known.
- (124.) There is in each cortical gland a certain substance of the cortex of the brain out of which the simple fibres arise, just as the medullary or composite fibres arise from the cortical glands; for the cortical gland which we call the internal little sensory is the cerebrum in its smallest effigy.
- (125.) This simple cortex or simple cortical substance is that most eminent organ of the pure intellect. For it exceeds in perfection that sensory of the imagination or perception, that is, the cortical gland, as far as this exceeds the cerebrum, or as far as sight exceeds hearing; for its form itself is superior, and indeed the highest form of nature, that truly celestial form which was described above. It knows no higher form except what is spiritual, and since this substance is placed in the highest apex of nature, it cannot be indicated by the same terms employed

in describing inferior substances, for these are too crude to be so applied. Therefore we can hardly call it the cortex, nor the cortical substance, nor an analogous or emulous cortical substance, nor anything but the most eminent organ. We may not name it a sensory, for it does not feel but understands. Wherefore in what follows I shall call this the *intellectory*.*

(126.) The sensory depends upon this intellectory, that is, sensation depends upon the pure intellect; for there is no sensation nor perception of sensation unless by some faculty more interior or superior it is understood what that is which is perceived. The smallest differences themselves which are in [every] idea, and exist between single ideas, cannot be distinguished by feeling and perception merely. There must be the intellectory which judges and decrees that this idea harmonizes with that idea or is discordant with it, and that it agrees with another and with still more which are related or similar: so that it may be known what is harmonious, what is particularly adapted, what pleasant, true and good. would therefore be no thought without the pure intellect, still less would there be imagination and sensation. The very organism of the body depends similarly upon its intellectory or inmost sensory. There is no composite cortex without the simple cortex, such as is that of the brain; for from the simple cortex simple fibres arise which arrange the gland itself through their own determinations. No cerebrum exists without cortical glands; no sensory of the sight, hearing, taste, smell, touch, and thence no body. Therefore all things regard this intellectory or pure intellect as their beginning, and at the same time the sense to which single operations refer themselves.

^{*} For the same reason which in the author's belief justifies his introducing this new term *intellectorium*, the translator believes that he properly uses the new term *intellectory*. It is strictly analogous to the use of *sensory* for *sensorium*, and besides (which one reason is alone sufficient) it seems to be the only expression which exactly answers to that of the author. [7r.

(127.) This intellectory recognizes above itself no other form than spiritual form, that is, the soul itself or the form of the soul; whence pure intellect does not recognize above itself anything except pure intelligence, which is of the soul, because this is spirit. Consequently we ought not to confound pure intellect with intelligence, or the intellectory with the soul; for the intellectory whose form is celestial and the first of nature can understand nothing from itself, but only from the essence or spiritual form; this alone understands, and causes that which next in order follows to understand. Thus it is evident that our soul is in a region above the possible perceptions of our rational mind. For we believe that thought is the highest and the proper power of the soul itself; but above that thought, which never exists except as impure or mixed, there is a purer thought, and above this a spiritual intelligence itself; and still above this there is a wisdom which is divine and not human; for intelligence draws its wisdom from a divine spirit alone, thus from God.

(128.) Thus the intellectory is born from the soul itself; its form is evidently from the soul's essential determinations; but what this first form may be, after the soul, cannot be easily expressed in words, since the attributes and powers of this form are beyond the sphere of common words. For words express only those things which are in nature and within the gyre of nature, but not the highest and those nearest to spiritual essence. This is why we have to speak concerning the intellectory in terms so general and but slightly intelligible as to their meaning, and why what is said has to be explained by circumlocution and by ideas sometimes involved. By means of these some obscure idea may be obtained, and even a comparatively clear one in those minds which are cultivated and possessed of a more profound judgment.

(129.) It cannot be doubted but that such an intellectory or pure intellect exists, for it manifests itself evidently in the several parts of our thought and speech, to

which it is nearest, and in which it most intimately resides: for we reduce the ideas themselves of the memory, not unlike those of the sight, in a moment into such an order, form, and harmony that a certain rational analysis thence results, which is known to be true or false by a kind of understanding in our purer thought. For sensations do not supply any other objects than those which are parts of the imagination; but to analytically reduce those into forms, and thus to conceive and put forth new forms, which again are parts of a sublime thought, and in them to observe truths, verisimilitudes, and probabilities from their connection and order alone—this is not a function of sensations but of the pure intellect; neither is it a process of thought itself, for the thought is what is reduced into such a form, and so it is a result from that intellect which is prior and which produces the intellectual or rational ideas of the thought.* Such an intellectual, analytical, philosophical, even spiritual principle is in every sentence and every speech, even of a child. For a child speaks momentarily in a manner more perfectly philosophical, dialectical, logical, grammatical, than all the Peripatetic and Pythagorean schools could learn to do artificially and scientifically. This is the reason why we learn philosophical sciences, as logic itself and other theoretical branches of knowledge, from our ownselves and from the inmost examination of our thoughts and speech, just as anatomists obtain a knowledge of the body from the inspection of the viscera. Wherefore there must be such an intellect inmost in us which shall prescribe rules and laws to those operations of our mind which lie equally hidden from us as the form of the brain, heart, stomach, lies hidden from him who has never examined the viscera; therefore the philosophic science is itself a certain anatomy of the mind, whose medicine is also sought for.

^{*} Compare the Deduction of the Catagories in the Transcendental Analytic of Kant's Critique of Pure Reason, Bohn's edition, pp. 55, 71 et seq. [Tr.

Whence it follows that no thought can exist, and therefore no speech, without the inflowing of such an intellect.

(130.) The operation of this intellectory, or this intellect, cannot but be pure, for its form is born of the essential determinations of the soul. These determinations are so many spiritual radii or pure intelligences. The form flowing only from spiritual radii, most perfectly determined, cannot breathe anything but what is purely intellectual. What this form is can be perceived by comparison with the form of the internal sensory, and of this with the form of the brain; nevertheless, it cannot be described. It is indicated, however, analytically by the simple elevation of perceptions from an inferior to a superior degree, and by the adding of something perpetual and infinite according to the doctrines of order, of degrees, and forms, of whose laws I have treated above.

(131.) Therefore to describe what the pure intellect is we must resort to universal terms, as was said, for it is the very nature of its own body, and the knowledge itself of the natural things which exist below it. For when the pure intellect acts it acts from itself, that is, from nature itself and knowledge, since all things flow into act in agreement with its intuition. For the pure intellect does not first inform itself [from other sources] how and in what manner it shall act, but from itself it knows those measurements, laws, rules, and truths, and other things which are found to be contained, although imperfectly, in the thought, imagination, external sensation, in the action, and in the several organs. In all of these there lies hidden what is the inmost and most abstruse in the sciences, as in the first philosophy, in logic, in anthropology, dialectics, physiology, physics, geometry, mathematics, mechanics, optics, acoustics, chemistry, medicine, jurisprudence, ethics, grammar, and in many others of whatever name. We may clearly behold an example and summary of the sciences in our whole organic system in its several members, parts,

and operations, all of which must flow and exist, not from themselves but from a certain efficient cause in which such a science is, or which is the science itself, the order, truth, harmony, and form of forms. These are all universal terms which apply to the pure intellect. Thus inmostly in ourselves we possess a most perfect knowledge of all natural things, and yet we anxiously seek how to learn some part of this science or of what is within us, or to draw this hidden knowledge out of its shadow into light. Thus this pure intellect can be called the science of natural sciences: for all single sciences are but parts of some universal science which we call the philosophy and mathesis of universals; for from this the pure intellect can descend into single parts whenever it wishes. Thus it appears that we cannot speak concerning this pure intellect otherwise than abstractly and obscurely.

(132.) This pure intellect comprehends simultaneously that which thought or our rational mind comprehends successively, the premises and antecedents for instance at the same time with the consequents, as in a conclusion or an analytical equation; principles and causes at the same time with the principiates, causates, and effects; for it views even effect as already existing in its efficient cause, thus everything to be formed as already formed, and everything already formed as to be formed; nor does it hesitate in thinking out the means, for it takes in the whole complex. A defect alone of instrumental causes hinders its act; for it contemplates all things past as present, and at the same time those future things which evidently flow connectedly and according to natural order. Thus concerning the operations of this pure intellect, we can neither predicate movements nor degrees, thus neither time, space, place, movement, celerity, nor any of those things which suppose succession and distance; for its form is the first of nature, and from this, as from a beginning or beneath it, the accidents and qualities of nature descend or arise. For celestial form embraces and, as it were, contemplates

all following forms as if existing in itself, when it begins its operations.

- (133.) The pure intellect beholds nothing as verisimilar or probable, but either as true or false, or how far it is from truth or falsity; whence all its ideas are so many natural truths, and from the truth it sees distinctly falses and fallacies, as the eyes distinguish shadows from light. Therefore its observations consist of so many truths being united among themselves, whence a universal truth arises. is the reason why the more intelligent, or those whose thought or rational analysis approaches nearer to this pure intellect, perceive and know many propositions as true or false at once, and indeed without demonstration a posteriori, from effects, experience, artificial logic, and the sciences of the scholars; indeed, often to such a degree that they are indignant that the mind should wish to demonstrate those things which are clearer, more certain, truer and higher than all demonstration; they regard the attempts of such demonstrations as so many dusky shadows. which do not illustrate but rather obscure. Such are we when we become pure intelligences or souls, for then we shall laugh at our literary treatises as child's play, and we shall regard the entire syllogistic logic as but a boy's game at odds and evens.
- (134.) The pure intellect, whose property it is to know universal nature and from itself to perceive and to know all nature's arcana, cannot be instructed by internal senses, still less by external senses; for the pure intellect itself has formed all the senses, internal as well as external, according to every idea of its own nature, and has furnished these with recipient organs before their use; consequently such an intellect, which is prior to the senses, can in no wise be acquired, cultivated, or perfected [by means of them], but remains just the same from the beginning of life to the last, whence it is as perfect in the embryo and infant as in the adult and old man, in Davus as in Oedipus, in an insane and stupid person as in an eminent philosopher.

The intellect which is capable of being instructed and perfected is just below the pure intellect; it is called the human reason, as also the rational mind. Its operation is that thought which is never pure but mixed, or which derives more from ignorance than from intelligence. These things are the cause of that strife which has arisen among the learned, Whether there are connate ideas, or Whether they are acquired, or Whether anything exists in the intellect which was not first in the sense; each proposition having its adherents. For there are indications of a kind of intellect innate in us, and all ideas are found to be connate; but the disposition and ordering of the ideas so that thence an analysis may exist cannot be connate, for this is something purely intellectual; at the same time there would be no ideas to be thus arranged in order except they were connate. From this it follows that either position may be true in a certain sense.*

(135.) From these things it is also evident that the pure intellect is unable to express and arrange its own ideas or universal truths through any speech; for the parts of speech are so many ideas, images, and forms, which are to be acquired by the way of the senses, and which stand far below; but the pure intellect represents its own simple and universal analyses in likenesses such as are seen in dreams, then also through parables and simili-

^{* &}quot;There are no innate ideas or imprinted laws in the human mind, but only in the soul; in which, unless ideas and laws were connate, there could be no memory of the things perceived by the senses and no understanding; and no animal could exist and subsist as an organic subject participant of life." (Econ. An. King., part ii., no. 300.)

[&]quot;It appears, then, that both those who advocate the doctrine of connate ideas and those who oppose it may base their arguments upon the same facts; showing that the controversy is not about the truth, but only about the mode in which the one truth or the other is to be explained. For if ideas are connate in the soul, and if ideas are procured to the mind, then the two opinions agree, and their reconciliation comes from the same demonstration as that which shows the communication between the operations of the soul and of the mind" (ibid, ii., no. 294).

The practical value of Swedenborg's doctrine of the distinction between the mind [mens] and the soul [anima] appears nowhere more manifestly than in the solution it affords to the difficult problem of innate ideas. See also nos. 308-311, in the above work. [Tr.

tudes, even through fables such as the ancients employed in the ages nearest to the Golden. For such things at the same time contain not only particular things but in general all things which relate to the same truth. These things our mind ought to interpret and evolve as the answers of oracles; for they are all obscure to our intellect, while in the pure intellect they are in a clearer light; for especially are we blind in truths themselves.

(136.) But it is not easily perceived by thought what the pure intellect is; it is even questioned whether it exists; for thought itself does not comprehend what is above itself or what is pure, being itself not pure but mixed. This indeed it does comprehend, that where there is a mixture there must be something pure with which the impure is mixed, or that into our thought where intelligence and ignorance or light and darkness reign together, there inflows from above a something intellectual which illumines the sphere of thoughts and furnishes the faculty of thinking, since the sensations of the body can in no wise effect this.* Then that there flows into the same from below, something that is not intellectual, whence the mingling of intelligence and ignorance; this is our mixed intellect or thought. But the pure intellect itself is the mediate between the spiritual intelligence of the soul, and the thought of our rational mind. To perceive what the pure intellect is, we must therefore inquire what the soul is and what the rational mind, then also what is the influx of both. These have been treated of severally, but a short recapitulation will be of use.

^{*} Compare Descartes' Meditationes de Prima Philosophia:—"Dum in me ipsum mentis aciem converto, non modo intelligo me esse rem incompletam et ab alio dependentem remque ad majora et majora sive meliora indefinite aspirantem, sed simul etiam intelligo illum a quo pendeo, majora ista omnia non indefinite et potentia tantum sed reipsa infinite in se habere, atque ita Deum esse, totaque vis argumenti in eo est, quod agnoscam fieri non posse ut existam talis naturae qualis sum, nempe ideam Dei in me habens, nisi re vera Deus etiam existeret." Swedenborg's proof of the existence of a pure intellect bears an interesting analogy to this celebrated argument by which Descartes sought to prove the existence of God. [Tr.

- (137.) The soul is pure intelligence, a spiritual essence and form, thence next above the pure intellect, whose essence and form is the first of nature or celestial; for the intellectory itself cannot be formed except from the essential determinations of the soul; as many determinations so many radii of spiritual light there are; for its intelligence is not natural but spiritual, and its science is not philosophical but metaphysical, pneumatical, and as I may say theological. From this it follows that its first descendant is the pure intellect, whose property it is to know most immediately both from itself and in itself all that which is natural.
- (138.) The ideas themselves of the soul are spiritual truths; but the ideas of the pure intellect are the first natural truths; the ideas of our intellect are called reasons, but the ideas of the memory or imagination are properly called ideas; the ideas of sight are images and objects; the ideas of hearing are modes, modulations, words. Such is the subordination of ideas; wherefore everything spiritual which is in speech is of the soul; but everything intellectual is of the pure intellect, everything rational is of the thought, and so on.
- (139.) But it may be asked, how does the pure intellect flow into the sphere of thought? is it an influx, or is it a correspondence and harmony? This we learn especially from the form itself of the internal sensory or cortical gland; for in this is contained the simple cortical which is called the intellectorium, just as the cortical substance is contained in the brain. This simple cortex is the origin of all the simple fibres, but that of the brain is the origin of all the medullary fibres and the nerves of the body. The pure intellect which resides in this above-mentioned intellectory or simple cortex cannot flow into the sphere of the thoughts otherwise than as the images of sight or ideas of imagination into the modes of hearing or into speech, which is not influx but correspondence; for the modes of hearing which are so many articulated vibrations

only move and vibrate the little sensories in common. Then the sensory itself, from use and experience, knows at once what such vibration and superficial mutation signifies. Hence its ideas concur, which is said to happen through correspondence. It is the same with the intellectory or its pure intellect; for when the sensory goes through its mutations of state, then the intellectory commonly acted upon, or as we may say externally brought into another situation, immediately knows from use and experience what such a mutation signifies; and so immediately concurs: thus it is not influx but correspondence. But concerning this more will be said below, where we shall treat of thought and intercourse.

XI.

INTELLECT, THOUGHT, REASONING, AND JUDGMENT,

or,

THE HUMAN INTELLECT.

(140.) There is no thought without imagination, because there can be none without the ideas of memory, which are as much parts of thought as of the imagination, since without memory we cannot think. It is therefore very hard to perceive distinctly what imagination is and what thought is. That they are so distinct from each other and can be distinguished appears in the case of somnambulists, who see with eyes open and with a sort of imagination, but often a perverted one because there is no thought in it; then again from brute animals, who are not without imagination even if they are without thought: also from those just out of infancy, who begin to prattle and speak things imagined but not things thought; many adults even being like them, varying in their capacity of thought and fancy. But because there is imagination in thought, and thought in imagination, we believe thought to be a certain more perfect and refined imagination, supposing that these could not be separated, as was said. It is important, therefore, to enquire more thoroughly what the one is and what the other.

(141.) Imagination is only a superior and internal sight. It is exerted when we reproduce single objects in that order in which they have been seen, as a palace or edifice with all its external and internal structure, then also its other furnishings, even to the very masters and

servants who inhabit it, without any other connection and order than were observed in the sight and hearing: it is the same with the cities, provinces, and king-These the internal sight doms which we have visited. or imagination observes collectively, while the eye observes them successively; then also the human body itself and its single viscera and parts, their position and connection, and finally their whole anatomy. So in other things; as in the several practical sciences, mechanics, experimental physics, astronomy, yea, also in theoretical sciences so far as we have learned and retained these by memory. Therefore imagination is the reproduced memory of things seen and heard, and a simultaneous intuition of them without any further progression into those things which have not yet been grasped by the sense.

(142.) Thought, indeed, does not rest content in the reproducing of mere ideas of the memory or of the imagination, or in viewing at the same time objects which have been successively brought before the external sight: but it goes farther, for from these and from other similar things successively run through and represented, it gets hold of and brings out some new idea never before seen, and indeed, it does this by means of a certain analysis not unlike an analysis of infinites, as for instance by the laws of natural philosophy, and by a mode of reduction, of transposition and of equation. This equation itself, formed by means of the mind alone, is called an idea of thought; thus an idea of the imagination is that which has been insinuated through the doors of the senses, but an idea of thought is that which is formed by the proper force of the mind from ideas of the imagination, resembling figures in a calculation. These ideas of thought, which are called rational, intellectual, and immaterial, once formed, however much compounded, are nevertheless regarded as simple ideas scarcely otherwise than as integral equations in algebra and integral analogies assumed

for unity in geometry and arithmetic. The mind distributes and divides these its own ideas again into some other order or rational form, and thus deduces another analysis and equation from these; hence arises a still more perfectly rational and intellectual idea. Thus thought is perfected and becomes more sublime and purer, and approaches nearer to pure intellect; and it ascends higher in that degree in which more ideas drawn into itself are assumed for simple ideas or truths; and as from these, arranged among themselves analytically, a still higher idea is elicited. In no other way can we be elevated to a knowledge of the pure intellectory, thus not by speech, or the use of words or of ideas of the imagination, for its truths are more sublime than words, nor can they be expressed and laid bare except by such vocal forms as have been elevated and drawn up to them.

(143.) Such, therefore, is thought; from the description of which it is clear what difference there is between it and the imagination: as, for instance, that the ideas of thought are acquired by the mind [mens] itself, but the ideas of the imagination are only from the external senses; and that the thought can be perfected and exalted as it approaches nearer to pure intellect, but imagination is perfected only by experience of the senses, both its own and those of others; for whatever the symbols of the memory are, whether acquired through one's own senses or through teachers, or through letters, or through tablets, all these are then ideas of the imagination because thy are of the memory alone, acquired through the senses; but they are so many parts and instrumental causes which the rational mind can make use of in order that thence it may form its own intellectual ideas and analyses. From this it follows that so much as we are able to understand but do not understand so much we hold in the memory; for the power of understanding lies in the memory, but from this potency alone no action follows; therefore something else

must be added in order that we may understand, and still more that we may acquire wisdom.*

(144.) Thought, therefore, is a superior imagination: and as there is a superior imagination, so also there is a superior memory. The inferior memory is a memory of all particular things and of those ideas which are insinuated by way of the senses, both of sight and of hearing. But the superior memory is a memory of general and universal things and of all those ideas which are formed and as it were created by means of the mind proper. also impress themselves in our memory just as if they were impressed on the sense, for when we think, the things thought and the results of these thoughts remain equally This memory, however, contains ideas rational, intellectual, and immaterial; while on the other hand, the inferior memory has only ideas of things purely natural and material. Therefore there is a memory of universals and a memory of singulars; and the former is of thought, but the latter of imagination. These memories, if we observed them more internally, are distinct from each other, for there can be a large memory of universals and a small memory of singulars, and vice versa; for the memory of universals comprehends in itself singulars which, as symbols of confirmation, can easily be drawn out, or can insinuate themselves. In order that singulars may be properly retained in their order by the memory it is necessary that we form an idea of all universals, which is called their reason. From this order [of the memory] singulars may be drawn forth as from a single general rule and knowledge of calculation; as in arithmetic and algebra, yea, as also in other theoretical sciences, we can of ourselves educe an infinite number of specials and particulars. Thus we are able to run through in a moment an entire book containing nothing but examples of particulars, and to understand all

^{*} Compare Aristotle's doctrine of the Potential and the Actual in relation to the vous or mind, in De Anima, iii, 4, 5. [Tr.

the things contained in it as well as the author himself. For the knowledge of universals can be compared with the sight, which from a tower or lofty mountain contemplates the entire region and the city below and the single objects in one view and glance, as it were; but he who walks about below and in the streets only comprehends certain parts successively, and thus scarcely one out of a thousand of those things which the memory of universals comprehends in an instant.

- (145.) Imagination, therefore, only takes in the form of an object, or of objects, and its quality, according to the order, the placing, and the connecting of the parts or of the ideas; but the thought draws forth not the material form itself of the parts, but out of such a form, or from similar forms collected together, it obtains a certain sense not in the visible parts and in the connection of the parts, but lying hidden within. Wherefore the thought is said to understand and the imagination to perceive, and the idea of the thought is called immaterial, and the idea of imagination material. An intellection [intellectio] is an inmost sensation.
- (146.) Thought can neither exist nor subsist, still less be perfected, without pure intellect. Pure intellect appears as though it flowed into the sphere of the thought to illuminate it by a certain light of intelligence; but there is no influx, for it is only a concurrence, a correspondence or an established harmony, in which, indeed, there is a greater, better and more perfect concurrence and correspondence, in the degree that the thought is more elevated. But before plunging our thoughts deeper into these psychological mysteries we ought to explain the meanings of the words themselves, or what is meant by understanding, judgment, thought, meditation, fancy, genius, and other terms.
- (147.) Such is the progress and course of the human intellect; for truly what we hear we see, that which we see we perceive by an inmost sense, that which we per-

ceive we understand, from things understood we think. from things thought we judge, from things judged we choose, from things chosen we conclude, from things concluded we will, and at length we act. This whole process is called the common intellect, in which the senses of hearing and seeing perform their own parts; but not the other senses, as smell, taste, and touch. The human intellect, or the intellect proper to man, consists in understanding, in thinking, in judging, in choosing, in concluding, in willing, and in acting accordingly. This whole course is, indeed, successively run through, but very often without the moments and degrees being observed. This velocity itself is called presence of mind, or according to others, the presence of the animus; but where the process is slower it is called absence of mind and sluggishness. There can be presence of imagination without at the same time presence of intellect, and vice versa, for the one is distinct from the other, as was noted above. He who promptly perceives singulars or takes them into the imagination, while the pure intellect promptly but slightly concurs, is called *ingenious*, and that faculty lis called] genius; but he who promptly understands those things which he perceives, while the pure intellect fully concurs, that is, who thinks sublimely and sees things in a way more harmoniously with the ideas or truths of the pure intellect, he is said to possess judgment, and that faculty [is called] judgment. Thus genius is the perfection of the imagination, but judgment is the perfection of thought; or genius draws more from the imagination and the external senses, but judgment draws more from pure intellect; hence genius is the characteristic quality of the intellect of animals, but judgment is that of the human intellect. Genius is common to boys, youths, the female sex, poets and singers; but judgment is common to adults, the aged, men, philosophers: for with age fiudgmentl matures and increases, whereas genius decreases. To the most perfect judgment, not only the pure intellect

but also the soul, or spiritual intelligence, communicates and confers rays of its own light. The parts of the human intellect or of thought are called rational ideas, or simply reasons. When these are first brought together and turned about before a certain judgment is formed from them, we are said to ratiocinate, and the minor judgments which are formed from them are called ratiocinations. Genius, therefore, does not form judgments [but] ratiocinations. When these ratiocinations are explained in speech the whole act is called discourse. But let us treat more especially of the course and the series of the parts of the intellect properly human.

- (148.) Understanding is a superior perception, and thus an inmost sensation. When, for instance, those things are understood which are perceived by an internal sight, I call it intellect because it is a sensation and a species of passion, as will be demonstrated below.
- (149.) Thought closely succeeds perception, for when we call forth ideas of memory, one after another, particular and common, singular and universal, and others similar and contiguous, then that operation is properly called thought, or a turning and revolving of the mind toward every part or idea. More intense and constant thought fixed deeply on one object is called *meditation*; the state and habit of meditation is called *phantasy*.
- (150.) When ideas or reasons are turned and revolved in thought they are at length brought into the form of some equation, into which are brought all the analyses and rational analogies, scarcely otherwise than in the analytical calculus of infinites. This equation is called judgment, to which belong merely those things referring to the matter proposed. The more perfect the form of the equation and the more similar and harmonious the things to be found in it so much the more perfect is the judgment; but it belongs to the pure intellect to perceive similitudes, consistencies, harmonies and truths; hence it is an exact judgment when the rational

mind has called the purer intellect into a closer intercourse.

(151.) It is from this analytical or rational equation, that is, from this judgment, that innumerable reasons and analogies are brought forward and collected. One reason is called forth after another in order; for, that we may know what an algebraic equation contains in itself, one thing after another must be evolved, otherwise we perceive nothing distinctly, nor will the mind be able to determine or follow the particulars distinctly in act. equation, therefore, must be resolved again before we can understand what it contains. The whole equation cannot be evolved at the same time, since its parts or analogies have entered into it successively and are in it simultaneously: these have therefore to be successively evolved. This operation is without a proper name, unless it may be called *election*, which being free coincides with free will or with the liberty of willing and acting. For this will choses freely, and thus concludes what is to be deduced from that rational equation or from the judgment, and what is to be sent into the will. It may on this account be called the conclusion. The completion of all is the will. Following this, and in it, is determination, from whence arises action, and from the action the effect. But before it is concluded that anything must be sent from the intellect into the will, and from the will determined through an action, there will have to be present also the love or desire of a certain end. For this reason I have not been able to treat of the will until these loves and desires have been first considered.

(152.) This properly human intellect now described is called thought; and in what follows we shall make use of the word thought. The question then arises, How does thought operate? It appears from the description that it operates like the imagination, that is to say, by changing the state of the sensory or of the cortical gland. But there are common and particular, general, special and

individual, universal and singular changes of the state of that sensory, and these which embrace particulars, individuals and singulars are properly thoughts, for they are induced and formed by thought itself. Since the state thus formed, in order to embrace single particulars, at first obscurely but afterwards distinctly, is not a state of the imagination, for this is concerned only with particulars and singulars. That there are infinite states and infinite changes of state the mind can hardly conceive, or how many analogies simple and compound there are, and how many series of analogies, or that these are capable of reduction one into another; but experience shows that these do exist and are actually represented, and the very perfection of superior beings consists of this faculty of changing the state. Since, therefore, the cortical gland or the internal sensory can put on so many changes of state it follows that the intellectory or inmost cerebrum, that is, the simple cortex, must be able to produce still more, even to infinity. For example, let us take certain thoughts reduced to an equation or general formula; then in this equation as in a general or common state there may be a thousand analyses. Therefore there must be a state of the common sensory which comprehends all distinctly. This is observed in speech itself and in writings, for one particular is educed after another, and the more distinctly this is done so much the more distinctly do they inhere in the equation [or proposition]; for we observe the singulars under a state common to all. This is so evident that by reflection alone we may see it to be true.

(153.) But as it has been said that pure intellect does not flow into the sphere of thoughts, but concurs with thoughts or with changes of state, it must now be explained in what way that act follows. First let us get a clear idea concerning the form of the internal sensory or of the cortical gland, namely, that it is indeed the cerebrum in the smallest form, with its simple cortex and its simple medulla like the large cerebrum, but more perfectly con-

structed. The change of state of the above-mentioned internal sensory itself is not able to effect any change of state in the intellectory or in the simple cortex, just as the change of state of the entire cerebrum does not change the state of any of its parts but only the external state of the parts, that is, their position, their connection and mutual relation. But since the external state agrees with the internal, or as the state of the parts cannot help being in agreement in some way with the internal states or with itself, it follows that the change of the external state announces and shows at once that there is a change of internal state, and of what kind it is. While the internal state is rendered conscious of this change it perceives at once what it means, precisely as the word; or speech perceived by the hearing are turned immediately as it were into ideas as of things seen, not by influx but by correspondence. For an idea can be expressed by another word and a different articulate sound and still the same idea will recur, as whether we speak the same sentence in Greek, Latin, French, Italian, English, or Swedish, still the same visual idea is presented. It is the use and culture, then, itself that causes that one idea corresponds to another. The same relation holds with the ideas of memory, of imagination, of thought, and of the pure intellect. An internal change of state of the sensory is an external change of state of the intellectory, but by use and experience the intellectory perceives from this external change of state what such a change means; at once it concurs, and by its concurrence produces a corresponding idea of the pure intellect. Accordingly the more universal, general, and common the change of state is so much the more distinctly is it perceived, as the essence and nature of the intellectory is thus more nearly reached. For all ideas are universal truths, and by verbal terminations they may be made more abstract.

(154.) From this it follows that we are able to come

nearer and nearer to the pure intellect, and indeed, by means of universal ideas and a certain passive power; that as we remove particular ideas or withdraw the mind from limitations—from the more broken, limited and material ideas, and at the same time from desires and loves which are purely natural,—then the human intellect, quiet and free from foreign disturbance, and dwelling alone with its own and what belongs to pure intellect, causes that our mind shall not suffer other changes or give forth other reasons than those which accord with the ideas of pure intellect. On this account our intellect experiences an inmost tranquillity and joy; for then this concurrence appears like the influx of a certain light of intelligence, illumining the whole sphere of thought: and in a kind of unanimity, I know not whence, it constrains the whole mind, and inmostly dictates what is true and good and what is false or evil. In this way our intellect is perfected by the maturing judgment; and, if I may speak from theoretical anatomy itself, when the mind comes into this state it is seen that then the simple medulla itself consists of simple fibres only, with a few vessels; for as many as are the simple fibres so many are the intellectual rays of pure intellect; but as many as are the vessels so many are the shades which darken the luminous or intellectual rays. But these observations are offered merely in passing.

(155.) From these things it already appears how the human intellect may be perfected; thus that in tender infancy there is none, that it may be increased in youth, perfected in adult age, that the judgment afterwards increases, while the genius or imagination decreases. For there can be no thought in infancy and still less in the embryo; wherefore there is a concurrence, correspondence, or established harmony, but not influx. Use and cultivation will bring about the correspondence and harmony, since the pure intellect concurs with every perceived change. But still, whether in the embryo

or in the infant, or in a stupid, or in an insane person. the pure intellect remains always the same; for it cannot unfold itself before it perceives the changes of state to which it shall correspond, nor can the sensory change its own states unless it shall learn how to do so by the use and the influx of the external sensations, as has been noted above. Thus the pure intellect comes forth and emerges just as from a prison in which it has been shut up, or from its own inmost bosom, according to the induced mutability [or power of change]. appears what has been present from the beginning of formation, but could not sooner evolve itself; and when it does evolve itself, which takes place in the course of age, then it exhibits itself as most present in every instant, in the single forms and harmonies of words, and in finding out their inmost meaning from the connection and order of the ideas alone.

(156.) But experience itself as well as theory proves that the human intellect proper depends little upon its pure intellect, but rather upon what is imagined, and even that the imagination depends more upon its sensations than upon its own intellect or thought; thence is our intellect exceedingly impure, so much so that it deserves rather to be called spurious and adulterous. Nevertheless it appears to us so beautiful and pure that we believe it to be the soul itself, which is not pure intellect merely, but even spiritual intelligence. How mistaken all this is appears from the mere statement. Our intellect is even so alienated ofttimes from the pure intellect that they combat each other, the one acknowledging worldly things as truths, the other knowing them to be wholly mendacious and that their fallacious ornaments pass them off for truths to gain applause.

(157.) Meanwhile, in order that the human intellect may exist, it is necessary that the truths themselves be variegated and as it were modified by things mendacious, or true things with false, good with evil. From this

mixed and relative variety and this coming together of opposites there arises a rational analysis. First it gives birth to opinion, hypothesis, some unknown principle, and many other things proper to the human intellect. Without a variation of intelligence and ignorance, thought and judgment can no more exist than a visual image without light and shade; which is the reason why light and clearness are predicated of intelligence, and shade and darkness of ignorance, for these have a mutual correspondence. Without such a variation there would be no society on the earth, no diversity of thought, manners, actions, bodies, no affirmations or negations, no uncertain results of things, no auguries, indeed no desires of ends to be attained, no terrestial loves, none of all those other things which as necessities contribute to human society itself. Neither would there be any speech or communication of thought by means of discourse unless by some superior or angelic discourse, which has nothing to do with earthly things.

(158.) The various kinds of insanity, which are infinite in number, originate from thence, that the states of the sensories are so perverted that they can undergo no changes except what are irregular and in disagreement with the pure intellect; and as the intellectory concurs [with the changes of the sensory] it concurs by the same law even with these [disorderly ones], and thus seems to consent, even though it wholly dissents. Thus it is the thought itself or the human intellect which is insane, and not the pure intellect.

XII.

OF THE INTERCOURSE OF THE SOUL AND THE BODY.

(150.) It will be vain to inquire how the soul communicates with the body, unless it first be ascertained what the soul and what the body is, as also what is sensation, imagination, thought, the pure intellect, the spiritual [intelligence*], what is will and action, what are the internal and external organs both of sense and motion, what is the connection of the organism, and a vast number of other points. For so long as it is unknown what the soul and the body are, and what mediates between these, all co-operation, communication, and intercourse must necessarily remain unknown. Only the unknown can be educed from the unknown; and about things whose essentials are unknown to us we can only speak ignorantly, however long we keep on talking. But still I will admit that I seem to myself not to have arrived at a single part of so vast a thought, supposing the thought itself to consist of myriads of myriads of parts, but only to have gathered up an obscure idea from what has been premised. But it may be more clearly seen that external sensations, and likewise actions, communicate with internal and the inmost sensations, even with the soul and its intelligence; for it is of the soul, which is the motive principle, the life and essence of our body, that in the body we live, move, and are.

(160.) This communication appears as though it were influx, for the mode and image of the outer sense seem

^{*} Compare number 166. [Tr.

to pass over into the idea of the inner sense; but lest the appearance should deceive us, let us penetrate by rational intuition into the very connections themselves of things, otherwise we shall easily mistake fallacies for truths.

(161.) It is evident that articulate sounds or words, or modes of hearing, in the brain or in the common sensory, are turned into ideas similar to those of sight, or into so many images; as when with words or in speech we describe a house or palace, a city, meadows, fields, the sky, and other things, at once the idea of these things is represented; but this communication or intercourse cannot be called influx nor harmony, but an acquired correspondence. The sound of these words is only a vibration, which cannot call forth an idea like that of sight. For whether we speak of palaces, cities, and fields in French, English, Latin, or Greek, this same idea is awakened, although the sound or the articulation of the sound is altogether different. But this correspondence is acquired by use and culture, for we learn to speak the language, and thus that such a modulation means such an image or such a villa or picture; as often as that articulation of sound returns so often the same idea returns. A physical and anatomical reason can also be given; for the sounds themselves, whether articulate and compound or simple sounds, put in trembling motion the fibres, the cortex, and the meninges. This trembling causes to vibrate the substances themselves, and it produces an alternate local motion of their parts. This alternate vibration induces no change in the internal state of the parts, but only in their external state or in the brain itself. Still the parts themselves, on account of the connection which they mutually hold and maintain among themselves, as also on account of the form itself, that is, their situation and order, perceive at once not only that there is a mutation but even what kind of a mutation is induced, and from use they learn what such a mutation means; consequently the sensory at length concurs with its idea.

(162.) But besides this acquired correspondence between the articulate sounds of speech or of hearing, and the ideas of the internal sight or imagination, there is also a natural correspondence, which flows not from the sounds themselves as sounds, but from their harmony, as from the melody of a song, from musical harmony, from the symmetry of words, or from the rising and falling of the voice in speaking, as also from the sound even of certain words which are called natural utterances; for they immediately excite the mind, affecting it either with love, or joy, or grief; such also is the speech of the brute animals. The cause is the same, originating doubtless from the connection, situation, order, form, or mutual harmony of the parts of the brain among themselves; which harmony corresponds with the form and internal state of the parts. For the form next below descends from the form above, and is thus born into a likeness of its superior, its prior, or its parent,

(163.) The communication of external with internal sight, or of the sensation of ocular sight with the imagination takes place by natural correspondence. As for the sight itself, this does not exist in the eye, but in the common sensory or cortical brain; it indeed passes through the eye, but it does not stop until by means of the fibres of the optic nerve and the medullary [substances] of the brain, it has raised itself or ascended even to the origins of the fibres, or to the cortical substance of the brain. As soon as it touches those origins it diffuses itself over their entire surface, and consequently through the entire structure: thus the ocular sight exists in this sensory itself, between which and the eve there is a continuous connection: this communication may in a certain sense be called influx. but it is rather the presence in the internal sensory of that image which was in the external. It is only sight, however; it is not imagination. Likewise with the hearing, which is not an activity of the ear, but properly of the brain; for it is conducted by continuous fibres even to

the brain; and thus the hearing and the sight can be brought together. For the hearing is an experience of the whole brain, and is a trembling of its parts; while the sight is an experience of the parts of the brain, or of the little brains, that is, the cortical glandules, and it is accomplished by a still more subtle trembling which causes to vibrate very slightly every part of its surface and structure. But, further, the communication of the sight with the imagination takes place through both the natural and the acquired correspondence at once; for while the images and phenomena of the ocular sight appeal to this common sensory, or to its own inner little sensories. the harmony itself of the object, of the images or of the phenomena affect the sensory or these little sensories in such manner that at once their state undergoes a certain change; for the harmonious exhilarates, expands and delights the sensory, while the inharmonious contracts, twists and grieves it. There are infinite such changes of state, as many, indeed, as there are kinds and species of harmonies and discords, and as many as there are generic, specific and individual differences, and as many as there are relations between opposites. Thus it is not the sight itself, but it is the harmony in the objects or between the objects of sight which induces this change. It is the same with the eye itself, and with the ear, which change their state according to the quality of the object presented. For the eye, like the body itself and its every fibre, even when most lightly touched, either contracts or expands, drawing itself in at that which would injure it and expanding itself at everything which would delight and restore it. Such also is the affection of the brain in common as produced by the harmony of sounds; this change of the sensory takes place by natural correspondence; the harmony is that of the parts among themselves, since an order intervenes, and a form is there which we declare to be the vortical; and such as is the harmony such is the correspondence. The brain and the human sensory are indeed formed into such a cor-



respondence, but as to the changes of state, these exist therein, not in act but in potency; unlike the case of brute animals, in which these are in act from the very birth; which is the reason why such changes of state are to be induced in man by use and culture, or actually, and why when they are induced they remain as aquisitions. Thence comes the memory and its ideas, and when these are reproduced then imagination exists. Therefore between the sight and the imagination there intercedes a communication by acquired correspondence, which presupposes a natural correspondence; for in this instance the one cannot be without the other.

- (164.) But the imagination does not communicate with the thought by any correspondence natural or acquired, for thought itself is equally with the imagination a change of state; it is, indeed, a more perfect imagination, the changes of whose states are induced by the habit of imagining abstractly from the sensations of sight. We have therefore to inquire what is the communication between the imagination or thought and the pure intellect; for in the degree that the imagination communicates the more nearly and perfectly with the pure intellect the more perfect does it become, and it is called thought and the purer and more rational intellect.
- (165.) Communication is effected between thought and the pure intellect equally by natural and acquired correspondence; for the one presupposes the other. For the pure intellectory is constituted of a certain simple cortical substance analogous to that which is in the brain; and since the internal sensory or cortical gland is the brain in its smallest form, and accordingly more simple and perfect, therefore from the brain and from the communication of hearing and sight with the imagination we may learn what is the communication of imagination or of thought with the pure intellect or with the intellectory, that is, with that simple and analogous cortical substance. The ideas themselves of the imagination or of thought induce a

change of state in the external intellectory, for they disturb those simple substances in their position, their connection, and their order, and so change the form and harmony of their state; consequently this intellectory understands from use what such a change signifies, and thence arises and is formed a correspondence which is to be called acquired; but the harmony itself in and between the ideas which are the rational and intellectual ideas of the mind [mens] affect the intellectory itself, not otherwise than as the harmony of objects of sight affect the sensory itself, and thus arises a natural correspondence. This harmony is not the same as that of the objects of sight, but is a rational harmony, and has for its object the true and the false, the morally good and bad. The harmony itself in the good and between the good is called love, which allures, and produces a rational pleasure, and excites the desire that the effect of love may be obtained, which effect is called the end desired. Such harmony, love, rational delight, and end, in the ideas themselves and among them, naturally affect the pure intellectory, whose ideas are pure natural truths and its harmonies pure natural goodnesses. There need be the less doubt regarding the natural correspondence, since we perceive by reflection alone that there is something interior in our thought which consents or dissents, affirms or denies, and that the truths themselves in certain propositions shine forth naturally as if from themselves; thus that there is a certain internal man which corresponds with the external man. there is also an acquired correspondence appears from this, that those ideas which are reproduced by changes of the state of the sensory are certain natural ones agreeing with the harmonies of the objects in and among themselves, but that those harmonies are still to be artificially co-ordinated and composed that the intellectory may derive a sense from them and understand what they signify. For the intellectory itself is not bound to ideas and words, but in order that it may understand the meaning of

words it must know from use what a certain change [of its state] implies. Meanwhile we may incline to either opinion, as to whether the intellectory, because not immediately connected with ideas nor instructed by them, knows naturally and of itself what a change of its external state means; concerning these points I am in doubt.*

(166.) But it will now be asked, What is the communication between the pure intellect and the soul? That intellectory which is assimilated to a certain simple cortex from which the simple fibres shoot forth as so many intellectual rays, cannot be the soul itself, for the intellectory must be created and formed out of substances which have a superior form, essence, and spiritual intelligence. That that communication is a correspondence will be understood from the parallelism or analogy furnished above; for the soul itself, which has formed this intellectory, perceives a change of its state as though outside of itself as often as the intellectory experiences its changes. Such accordingly is the correspondence that the soul, from itself, without previous exercise or experience, understands what these changes mean. For the pure intellect is not instructed by the experience of the senses, still less the soul which has established this its intellectory; as may be proved by innumerable psychological phenomena, as from this universal proposition, which may be affirmed as it were at will and without arguments a posteriori, namely, That the natural cannot flow into the spiritual, or that the rational man does not learn that which is purely spiritual from himself. The intellectory itself is the first form of nature, thence the first natural; but the soul is spiritual and above the natural, although through the pure intellect it operates that which is natural.

(167.) From this it will now appear that the inter-

^{*} The Author adds here in the margin: "I believe that it is a natural and not an acquired correspondence." [Tr.

course between the sensations of the body does not take place by any influx whatever, least of all by a physical influx, unless we wish to understand by influx a natural correspondence, but even then it is an influx of the harmony itself and not an influx of the things which form the harmony. The author of Occasional Causes seems to have understood such an influx [of harmony to exist]. The natural correspondence itself coincides with preestablished harmony, and the acquired correspondence with the co-established harmony; for even the natural correspondence itself flows from the co-established harmony, which in the soul is indeed pre-established, but between the soul and intellect, and between this and the thought, is co-established; still, existing as it has before other correspondences have been formed, it may be said to be pre-established, or established before those harmonies. In this way may be reconciled the hypotheses regarding the intercourse of the body and the soul; of those, namely, who assert occasional causes, those claiming a physical influx, and of those who claim a pre-established harmony; * for the ways, modes, and differences of com-

^{* &}quot;Descartes considered body and spirit as constituting a dualism of perfectly heterogeneous entities, separated in nature by an absolute and unfilled interval. Hence the interaction between soul and body, as asserted by him, was inconceivable, although supported in his theory by the postulate of divine assistance. Hence Geuliux, the Cartesian, developed the theory of Occasionalism, or the doctrine that on the occasion of each psychical process God affects the corresponding motion in the body, and vice versa."—Ueberweg, History of Philosophy, ii. p. 42.

"It is not possible, says Leibnitz, that the soul or any other true substance should

[&]quot;It is not possible, says Leibnitz, that the soul or any other true substance should receive anything from without, unless through the Divine omnipotence.... There is no influxus physicus between any created substances, hence not between the substance which is the soul and the substances which make up its body. ... Further, the soul cannot, as Descartes supposed, influence or modify the direction of the bodily motions. ... The doctrine of Occasionalism makes miracles of the most common events, since it represents God as constantly interfering anew with the course of nature.

[&]quot;It is, rather, true that God from the beginning so created soul and body and all other substances, that while each follows the law of its internal development with perfect independence [spontanêitê], each remains at the same time at every instant in complete agreement [conformite] with all the rest (hence that the soul following the law of the association of ideas, has a painful sensation at the same instant in which the body is struck or wounded, and conversely, that the arm conforming to the law of

munication being rightly understood, the writings of the three schools are seen to agree. On account of this agree-

mechanics, is extended at the same instant in which a particular desire arises in the soul, etc.).

"The relation of this theory of Pre-established Harmony to the two other possible explanations of the correspondence between soul and body is illustrated by Leibnitz through the following comparison: A constant agreement between two clocks can be effected in either one of three ways, the first of which corresponds with the doctrine of a Physical Interaction between body and soul, the second with the doctrine of Occasionalism, and the third with the system of Pre-established Harmony. Either both clocks may be so connected with each other, through some sort of mechanism, that the motion of the one shall exert a determining influence on the motion of the other, or some one may be charged constantly to set the one so that it may agree with the other, or both may have been constructed in the beginning with such perfect exactness that their permanent agreement can be reckoned on without the interference of the rectifying hand of the workman. Since Leibnitz held the exertion of a physical influence by the soul on the body, or vice versa, to be impossible, it only remained for him to choose between the last two theories, and he decided in favour of the theory of a 'consentement preëtabli,' because he considered this way of securing agreement more natural and worthy of God than that of occasional interference."-Ibid., p. 109.

To the three theories of intercourse between body and soul here named, namely, Physical Influx, Occasional Influx, and Pre-established Harmony, Swedenborg evidently does not intend to add a third, but rather hopes to find a term which shall be inclusive of the truth concealed in all the three. This he finds in Correspondence, when understood in its two senses, namely, as Natural and Acquired; the Natural Correspondence arising from a pre-established harmony in the soul, which however is a co-established harmony or occasional influx in each instance of bodily action. In his later theological writings Swedenborg emphatically declares for the theory of Occasional Influx, which he designates distinctly as "Spiritual Influx" or that of "the soul into the body," as maintained by the "followers of Descartes." "This theory," he says, "originates in order and its laws. For the soul is a spiritual substance, and therefore purer, prior, and interior; but the body is material and therefore grosser, posterior, and exterior; and it is according to order that the purer should flow into the grosser, the prior into the posterior, and the interior into the exterior, thus what is spiritual into what is material, and not the contrary; consequently for the cogitative mind to flow into the sight according to the state induced on the eyes by the objects before them, which state that mind disposes also at its pleasure, and likewise for the perceptive mind to flow into the hearing, according to the state induced on the ears by speech."

The other two theories, both that of Physical Influx which he attributes to Aristotle and the Schoolmen, and that of Pre-established Harmony which he attributes to Leibnitz, he repudiates as arising from appearances and fallacies, it being a "fallacy of the reasoning faculty to establish that which is simultaneous and to exclude that which is successive. For the mind in its operation acts as a one and simultaneously with the body; but still, every operation is first successive and afterwards simultaneous. Now, successive operation is Influx and simultaneous operation is Harmony; as when the mind thinks and afterward speaks, or when it wills and afterward acts. See the tract On the Intercourse of the Soul and the Body, nos. 1-18. By simultaneous operation and harmony are here apparently meant the same as what in the present number the author calls natural correspondence and pre-established harmony, while successive operation and influx coincide with the acquired correspondence

and co-established harmony. [Tr.

ment I would wish that this intercourse might be said to take place by correspondence. For so do these hypotheses also mutually correspond.

(168.) But this intercourse or communication is that of the bodily senses with the soul. It may be asked what is the communication of the actions with the soul, since, indeed, both body and soul possess the power of acting as well as of being acted upon. Even the passion or sensation itself performs a certain gyre and goes over into action; for it has been shown that the internal sensory perceives and understands; it revolves the things understood, or it thinks; from things thought over it judges; from things judged it selects what agrees, and so it concludes, wishes, determines, acts, and thus by action produces an effect agreeing with the end desired and understood. Such being the gyre which takes place before a sensation passes over into action, it is asked what is the intercourse of the actions of the body with the soul.

(169.) The cortical brain is a common motory as well as a common sensory; from this depend the actions of the body which take place through the muscles. common motory or cortex of the brain actually expands and contracts itself while it is determining any action; and this constriction and expansion is called determination. By this expansion and constriction, or by the systole and diastole, it expels through the composite and simple fibres its animal spirit and purer blood which produce that action, and thence there is a real communication of operations by means of a fluid. Hence there is in the sensory the force itself acting or determining; but in the muscle there is the action which takes place through the connection and influx of the fibres and of the fluid in the fibres into the motor-fibres of the muscle, according to the nature of the determining force and the form and organism of the muscles. For according to the rule, from force follows action. But how the will produces this force may be understood by comparison with endeavour. The

will is as it were endeavour; this when resistence is removed breaks into open motion. So the will when rational obstacles or impossibilities are removed breaks into open action. Thus the will is as it were a perpetual effort to expand and contract its sensory as soon as the intellect perceives that nothing opposes.

(170.) But the pure intellect or the intellectory concurs by consent with this force or first action: for the sensory cannot be expanded or constricted unless the intellectory consents, since to this belong the simple fibres, yea, the beginnings of the simple fibres, which unless they concur no action whatever can be determined. For in order that the purer blood may be determined through the medullary fibre of the brain, and the nerve of the body into the motor fibres of the muscle, it is also necessary that the animal spirit shall at the same time be determined through the simple fibres; without the agreement of both, the animal machine would labor and the fibres be broken asunder. To the sensory itself is given the power of changing its internal state, which is the external state of the intellectory; therefore whether the intellectory wills or not, still it must concur; for unless it favors by consent and concurs, the external state of the intellectory itself, the internal state of the sensory, as also of the brain which is the external state of the sensory, and hence the state of the whole body, would run the risk of perishing and of becoming extinct and void. Hence the necessity of preserving health and integrity enjoins that the intellect shall descend into those parts and consent. We say "favor with consent" when loves and ends agree, or correspond; otherwise we say simple "concur;" for in order that there may be action there will be a principal cause, etc.

(171.) But indeed, when no rational will precedes, as in the cerebellum and in the brain itself during sleep, then every force begins immediately in the pure intellect, the natural necessity itself and the safety of the whole king-

dom impelling. For the intellect is in a moment rendered conscious even of every minutest change of its body and of its parts, which is the reason why the intellect restores what the will destroys, and why the will is so blind that it may drive its body at any moment upon the rocks, like the sailor the ship, while the intellect in the time of the sensory's quiet and of sleep sets it free again and brings it always into a new port. called instinct, for the human intellect does not become conscious of its operations; inasmuch as whatever flows immediately from the pure intellect does not come to the consciousness of our mind. This is the reason why that stupendous economy of the natural body flows spontaneously, as it were, by a most constant law, according to all the science of nature; for the pure intellect is itself science, harmony, order, truth.

- (172.) The soul does not concur with the pure intellect by consent, for producing action, but by permission; for it suffers the sensory to act, otherwise there would be no free choice of moral good and evil; for as soon as the soul perceives from the consent of the intellectory that the sensory wishes to operate, in a certain way it suffers and permits the animal machine which is below itself so to act, as likewise the intellectory itself in the case of night-walkers; for all the soul's liberty of acting in its own body is, since the fall of the first man, taken away, and given to the sensory; all that is left to the soul is that it may supply and maintain in the several parts [singulis] the faculty or power of acting and of suffering.
- (173.) From these things it will appear how the soul concurs with the actions of her body, namely, by permitting; while the pure intellectory concurs by consenting; but the sensory by active force or by acting: from this follows the action of the muscle which is held to act and to obey just as the sensory orders, and thus the body concurs by obeying.
 - (174.) But it is further asked, How does the soul com-

municate with the motory and sensory organ of her body so that she may supply to them the faculty of acting and of feeling, and sustain this faculty? From what has been above stated it plainly appears that there is a soul which feels; that is to say, it sees, hears, tastes, perceives, thinks, understands, judges, wills; or that the body derives from the soul its power of feeling and of acting. But this is not a communication or intercourse; it is the presence itself of the soul, which actually is in the whole and in every part of her body. For there is no external motory or sensory organ which does not consist of vessels and fibres; no vessel which is not constructed out of fibres, no such fibre which is not constructed out of simple fibres, and no simple fibre which does not derive its origin from the intellectory, which itself is derived from the substances of its soul: consequently there is no external motory or sensory organ which does not derive its essence from the soul; thus there is a real presence or a kind of omnipresence of the soul everywhere, which forms the organs so that they shall perceive thus and not otherwise; for every one [of these] derives from its form that it is such as it is taken to be. Especially also the soul conducts the single fibres in which she entirely resides, from the organs to the brain, where she has formed the common sensory which perceives distinctly things presented, and understands them in its manner. For the sensory derives from its form also that it is what it is, and that particulars communicate by a certain correspondence with one another and at the same time with the man himself, so that he may know those things which occur and happen without.

Part Third.

THE AFFECTIONS.

XIII.

OF HARMONIES, AND THE AFFECTIONS THENCE ORIGINATING, AND OF THE DESIRES IN GENERAL.

- (175.) There is no entity and no substance in the universe without form; that it is anything and that it is such as it is, is owing wholly to form. The essential determinations constitute form; and what those essences are which are determined cannot be conceived without the idea of parts or of substances, nor this determination itself without the idea of fluxion or co-existence; these substances themselves are called determinating, and that which is determined by substances is a new but composite substance, in which there is form.
- (176.) The substances which determine themselves or are determined hold a mutual relation, and this is called analogy; the analogy of all the determinations, whether it be successive or simultaneous, is called Harmony or Discord. Therefore each form has either its harmony or discord. From the harmony or the discord is known the quality of the form.
- (177.) As forms are perfect or imperfect so also are the harmonies. There are forms which in themselves and by their nature are most perfect, and those which are in themselves and by their nature most imperfect, between which there are infinite degrees; so with the harmonies.

Forms and harmonies are most perfect in themselves and by their own nature when this is perfect. But forms and harmonies are also imperfect by nature, but this is then called an imperfect nature. The nearer the forms approach to perfect nature so much the more harmonious are they, and *vice versa*.

- (178.) The forms which are more simple, prior, and superior, in themselves and by their nature are more perfect than the composite, the posterior, and inferior forms; likewise the harmonies. But from examples:—The most perfect angular form or form of angles is the equilateral triangle or a figure of three similar corners; the more imperfect angular form is the oblong, the parallelogram, the trapezium, and others similar. The spherical or circular form is in itself and by its nature more perfect than the triangular form, but the most perfect of the spherical forms is the circular; less perfect are the ellipses, cycloids, parabolæ, and others. Likewise in superior forms, whether it be in spiral, vortical, celestial or spiritual. Such as are the forms such are the harmonies, which derive their entire quality from their forms.
- (179.) In every form there is its *state*, which is the coexistence of the substances which are being or have been determined. This state is itself called *harmonious* when the substances co-exist or succeed according to the perfect order of nature.
- (180.) Every form except the angular, in the atmospheric world and in the animal and vegetable kingdoms, is able to change its state, and from a more perfect natural state to pass over into imperfect ones, and from these to return again into the more perfect. The power of changing state is itself the perfection of form, which in superior forms is so great that these changes of state exceed all number, and are to be reckoned as infinite.
- (181.) When a circular form passes over into elliptical and other geometrical curves, it is said to change its state; thus also when a spiral form passes into spirals of another

genus, geometrical or arithmetical, it is said to change its state. It is the same with the superior forms, whose varieties of form cannot be geometrically demonstrated nor expressed in words. The most perfect form, in whatever degree, is unchangeable; but the others in their degree are changeable; so the circle is alone in the circular form, but there are infinite ellipses; and so with the rest.

- (182.) But still the simple expansions and contractions of the same form are not changes, for in the expanded or the contracted form the same essential determinations, analogies, and harmonies remain; they are rather *modifications* by which the forms exercise their forces. But by expansions or contractions the very nature of the form of exercising its forces is varied.
- (183.) Forms which are able perfectly to change their states, at once to expand and compress, actually produce harmonies by change of their state, as also by as many and as various modifications as possible. These same changes of state which forms produce are again so many essential determinations from which results a new form having its own state and harmony. From these again when there are many similar ones, new forms arise from the changes of state, and so on; similarly with the harmonies.
- (184.) All changes of state take place successively; but when, by these, new forms are produced, then all the changes of state which have been made successively exist in these simultaneously. Thus there are forms, states of forms, and harmonies common and particular, universal and singular, or general, special, and individual. From which it appears how infinite a diversity there is of forms, states, and harmonies.
- (185.) But modifications, which are variations of dimension, or expansion or contraction of the substance to which the form belongs, produce a harmony by a certain mutual relation. Such are the harmonies of sounds, of objects of sight, of colours, in and among themselves.

Thence it follows that there are also forms of modes which are simply called modifications.

- (186.) Harmonies of the atmospheric world are effected by modifications only, and not by changes of state. The forces are in these modifications themselves. But the harmonies of the animal kingdom are produced as well by the modifications which are its so many forces and actions, as by the changes of state which are so many sensations.
- (187.) The organs of the animal kingdom, both external and internal, are so formed that they may receive modifications of the atmospheric world and turn these into sensations; thus the modifications of the air they turn into the sensations of hearing, and the modifications of ether into the sensations of sight. And especially the organs named, particularly the internal, are affected, not by the modifications themselves but by the harmonies of the modifications, in such manner that they change their states conformably to the harmomies, whence come perceptions. Thus is sight turned into imagination, and imagination into ideas. This is said to take place by natural correspondence.
- (188.) Neither the external nor the internal organs of all are affected similarly by the same harmonies of the modifications of the atmospheric world, but according to the quality of the organs so they are affected, for so do they correspond. The diversity of the reception of harmonies or the diversity of affections is as great as the diversity of brains or of men.
- (189.) Affections are changes of state corresponding to the harmonies which flow especially into the sensorial organs. The whole brain or the common sensory is affected by the sonorous harmonies of the hearing; the inner sensory by the harmonies of the objects of the sight; the pure intellect by the harmonies of the ideas of the imagination, and especially of the thought; the soul by the harmony of the natural truths of the pure intellect;

God by the harmonies of the higher or spiritual truths of the soul.

- (190.) From this it appears that there is nothing in the created universe which cannot be referred to forms, or to ideas which are so many forms, or to harmonies and to affections, or that cannot be explained by means of forms, ideas, harmonies, and affections.
- (191.) All harmonies affect the sensorial organs, both external and internal, either pleasantly and delightfully or unpleasantly and undelightfully, that is, they either afford joy or they cause sadness. The more perfect harmonies are pleasant and delightful, but the more imperfect or the disharmonies are unpleasant and undelightful. For the delightful harmonies soothe the sensories by refreshing and vivifying them, but the undelightful or the disharmonies grate against them because they are destructive and deadening.
- (192.) But all harmonies are relative to the harmonic state of the sensory which is affected. Perfect harmonies seem undelightful in the sensory whose state is disharmonious, and as the harmonies are the more perfect so much the more undelightful are they to it; therefore the disharmonies are the very harmonies themselves of such a sensory. But because the harmonies, like forms, are perfect or imperfect in themselves, both in their nature and in their essence, we have to judge from the affections concerning the state of the sensory. But to judge truly it is requisite that the state of the sensory of the person judging be perfectly harmonious.
- (193.) Therefore such as is the state of the whole brain such will be its affection by the harmonies of sounds of hearing; as is the inner sensory so its affection by harmonies of objects of sight; as is the state of the intellect so its affection by harmonies of ideas of thought; as is the state of the soul so its affection by the harmonies of natural truths. God, who is love and perfection itself, judges from himself concerning the harmonies of the

spiritual truths of the soul. The devil is affected unpleasantly and saddened by the most perfect spiritual harmonies, but is happily affected and delighted by disharmonies.

(194.) We seek and desire what affects our senses pleasantly and delightfully; we are averse to what affects us in an opposite manner; for pleasant and delightful things soothe, refresh, and vivify, but the unpleasant and undelightful are grating, destroying, and mortifying: therefore so far as we love our integrity, health, and preservation, so far we desire pleasant and delightful affections: and as much as we hate infirmities, destruction and death, so far we are averse to what is unpleasant and undelightful. On this account the brain seeks, longs for, and desires the allurements of touch, the sweetnesses of taste, the pleasantnesses of smell, and the harmonies of hearing; the inner sensory, the beauties and the pleasantnesses of objects of the sight; the pure intellect, the verisimilitudes and delights of the rational ideas of thought; the soul, the favour and love of the natural truth of the pure intellect; God, the health and happiness of souls.

(195.) But our external and internal sensories are so conjoined and so distinct that what the one seeks the other very often is averse to, and vice versa. The external sensories are able to be delighted with the harmonies of the world and with the pleasures of the body, but the inner sensory is saddened by these. The intellectory on the other hand is made happy in this saddening; and so Thus often the internal is in collision and combat with the external man. Anatomy itself declares the same fact, that the organ of seeing and of hearing is one thing, and the common sensory or the brain is another; while the inner sensory or the cortex of the brain is something still different; and so is the pure intellect or the simple cortex of each internal sensory. The form, state, and harmony of one of these may differ immensely from that of another; whatever is the connection, situation, and

order of the substance of the brain, there may be nevertheless a connection, situation, and order of more simple substances of the inner sensory, because a correspondence is acquired by use and cultivation. For each has its own selfhood; and the state which is the internal of the one is the external of the other, and so on. Thus there are given no similar affections, and rarely do they correspond to each other in the sensories.

(196.) Appetite is predicated of all those pleasant affections which are proper to the body, its viscera and organs. Its affections are themselves called pleasures, delights. Longing [cupiditas] is predicated of all those pleasant affections which are proper to the brain or common sensory; desire, as also wish, of all those which are proper to the inner sensory; loves, of those which are of the pure intellect; love, simply of those which are of the soul. But owing to these distinctions being unknown, the one of these affections is by many taken for another.

XIV.

OF THE LOWER MIND [ANIMUS], AND ITS AFFECTIONS IN PARTICULAR.

- (197.) To the brain are attributed sensations, as the sight, hearing, smell, taste, and touch; wherefore the brain is called the Common Sensory; its organs and instruments are in the body and of the body, such as the eye, ear, nostrils, tongue, and skin. These do not feel, but they distinguish, receive, and transmit the forms of touch to the brain; which is the reason why, when the brain is diseased, the senses, which appear as if they were in the organs themselves, grow languid.
- (128.) Sensations, however, are not attributed to the animus [or lower mind], but those affections which also are called its passions. For the cerebrum feels but is affected by sensations according to its form. Therefore the animus is the form of the ideas of the common or external sensory, and the active and living principle of all the changes of the body. As the animus is affected so it desires, and as the desire of the animus such is the pleasure of the body; for the animus is such as the form of the sensory is; thus from the form of the sensory we may judge of the animus, and from the animus we may judge of the sensory.
- (199.) The affections of the animus either agree or disagree in general with the common sensory. Those which agree are pleasant, those which disagree are unpleasant. Pleasant affections expand the brain and diffuse the animus; unpleasant affections compress the brain and confine the animus. But irregular affections twist the brain and

confuse the animus. Pleasant affections refresh the brain and exhilarate the animus; unpleasant ones wound the brain and sadden the animus. Pleasant affections restore the brain with new heat and the animus with new life; but unpleasant affections destroy the brain and extinguish the animus. Thus pleasant affections are so many heatings of the brain, and consequently of the body, and so many resuscitations of the life of the animus, and consequently of the sensations and actions of the body; but the unpleasant affections are so many torpors and frigidnesses of the brain and therefore of the body, and so many perils of the life, and swoons and deaths of the animus and thus of the sensations and actions of the body. For the animus and its affections, both pleasant and unpleasant, die out with the brain.

(200.) There are several kinds and numberless species of affections of the animus; as, joy and sadness, patience and anger, loves and hatreds, envy, courage and fear, temperance and intemperence, clemency and cruelty, ambition and pride, liberality and avarice, and many more. But there are those which belong to the common sensory and the animus and are called the animal affections, and those which belong to the internal sensory and its mind [mens] and are called the rational affections; and there are those which participate in both. Therefore we must treat of each in particular.

Foy.

(201.) Joy is a general affection of pleasure, for all pleasant affections delight and gladden, or cause joy. Its causes are all those harmonies in general and in particular which accord or agree with our sensories and please them, especially with the internal sensory when this is looking to fortune, to happiness, to the restoration of life or of body. Joy expands the cerebrum and diffuses the animus, to which it slackens the bridle as it were, allowing it to

act freely. This expansion of the cerebrum and diffusion of the animus is visible in the face itself, in its sensorial organs, which likewise are animated, and in the whole body which, before constrained, swells freely in joy. Through the general expansion, by extended swellings of the cortical substance of the cerebrum, each internal sensory also is expanded. In this state one does not compress another. whence we awaken into a certain more perfect life just as from a sleep. The blood flows more freely through somewhat larger and somewhat smaller vessels, and runs through its own glands and fibres. Whence the universal chyle of the brain and economy of the body is restored. For whatever is the animus of the cerebrum, the same is transfused into the body, since there is a continuity of all from their own origins or cortical substances. This is the reason why we are able, from the body, to judge of the affection of the cerebrum or of the internal common sensory, and especially from the countenance on which is inscribed the mind. In excessive joy, not only are the muscles of the cortex, the medullary strata, and the fibrous and vascular canals of the brain and body opened, but also the pores of the cranium and bones; then also such passages as the chyliferous, lymphatic, and salivary ducts and others pour out liquids suitable for animal economy, as do also the transpiratory pores of the skin. Thus through joy all ways of communication are opened. In the state of joy, an agreeable and pleasing tremor, also the vital heat, the light, the presence of the animus, is diffused around the common external sensory as well as the internal; this lively trembling and light in the countenance is manifestly betrayed by the eyes and by the speech itself and every action, thence also the brain is cleared, restored, and vivified, and in that moment glides back as it were into the state of its first youth and innocence. Besides this subtle trembling also more visible vibration or laughter arises; for the brain leaps and oscillates, and in the same way the lungs, the windpipe, articulated sounds, the face and

joints of the body. This is called laughter, for joy itself is an affection of the internal sensory, but laughter rather of the common sensory or brain, which is unable to exist without the inmost joy of the internal sensory, and a reflection of its intellect; whence laughter is not given except in man; for in order that it may exist the mind must perceive a cause for joy and see a present or foresee a future happiness, which thus breaks into a tremulous effect from the inmost. In a state of joy the mind is inclined to every kind of vibration and actual reciprocation as to melodies of singing, to leapings and flinging of the limbs, because all things are loosened and set free. The first degree of joy is to be content with one's lot, second, hilarity, third, joy, and the fourth, which is also the last effect, is laughter and a flinging of the body.

Sadness.

(202.) Sadness, however, which is also termed sorrow and distress of mind, is the general unpleasant affection, for all unpleasant affections cause sadness. The causes are all discords, in general and in particular, which disagree with or are not fitting to our sensories, especially to the internal sensory, when it perceives or suspects misfortune, unhappinesses, the extinction of life or the destruction of the body. Sadness compresses the brain and torments it, casting the mind as it were into fetters and chains and depriving it of its liberty. This constriction of the brain and anxiety of the mind appear in the countenance in its sensorial organs, which are likewise compressed so that tears are forced out; as also in the whole body, which, before expanded, is now manifestly contracted. Through the general constriction of the brain, the muscles of the cortical substance being closed, every internal sensory is restrained and loses its liberty of acting, for in this state one compresses the other, whence the brain becomes heavy and torpid, the blood is impeded, nor does

it flow freely through the greater and smaller vessels; or it is denied to the purer blood or animal spirit to flow through the glands and fibres, whence is cacochynia, ataxia, atrophia, melancholy, and the causes of many diseases. In the deepest sadness not only are the cortical beds and medullary strata of the cerebrum, of the cerebellum, of the oblong and spinal medulla, constricted, and the fibrous and vascular canals of the brain as well as the body, but also the pores of the skull and of the bones, and the passages, as the chyliferous, the lymphatic, and others which pour out liquids serviceable for the animal economy, all of which if compressed do not fulfil their uses in the kingdom. Thus through sadness all the ways of communication are, as to some parts, closed. the state of sadness an unpleasant torpor and stupor, coldness, darkness, absence of mind and of animus occupy the common as well as the internal sensory. This torpor and darkness appear manifestly in the countenance, eyes, and speech; hence the brain is as it were clouded and obscured, twisted, vexed, destroyed, and the mind extinguished, or falls into a kind of premature old age. In sadness, because the brain suffers and the single ducts are compressed and strive to raise themselves, there arises the effect the opposite of laughter, namely, weeping and bewailing. Sadness itself is an affection of the internal sensory, but weeping is of the common or external sensory, that is, of the brain, and it cannot exist without the deepest sadness of the internal sensory and without a reflection upon an unhappy condition and misfortune present or future. Wherefore weeping does not occur except in man, nor can it arise except from a mixed intellect, which does not know the future. The first degree of sadness is not to be content with one's lot, another is a certain concealed anxiety, a third is sadness itself and grief of mind, the fourth or last, which is the effect, is weeping, bewailing, and inaction of the muscles of the body.

Loves in General.

(203.) There are many species of affections of the animus which are called loves, such as venereal love, conjugial love, the love of parents toward their children (or storge), and friendships. The several loves are as it were so many conjunctions, bindings, consociations of parts with a whole; for to live without love is as a part disunited from a whole; for every part, that it may live, draws its lot in life from the common body, or from participation with many. Society is the very form of living for the several parts; the quality of the life of the single member flows from the form of the many or of the society. Thus a single life without this connection is respectively nothing, and that it may be something loves are conceded, by which we are connected and through which we regard our friends as ourselves, as united and not separated. Thus there are loves of the body or venereal loves; loves of the animus, as conjugial love and the love of friends; and there are loves of the mind, loves of the intellectory, loves of the soul. From these things it can be seen that love properly is vital heat itself and the very force of life; for without love the single members would become torpid and extinct.

Venereal Love.

(204.) The venereal act of love is a conjunction itself and union of two bodies into one. The cause of this is said to be most deeply hidden even from the soul and the pure intellect; these regard effects not as effects but as ends, and their ends are that society may exist, and that members of society may be produced, both of a terrestrial society which is of the pure intellect, and of a celestial society which is of the soul. The rational mind itself, partly from itself and partly from things revealed, perceives and understands these ends. The animus simply

desires the effect and the body obeys. How great is the desire of this end in the mind and in the pure intellect becomes manifestly apparent in the delights and in the stimulations of the body to that effect.

(205.) Venereal desire is excited by objects of the five senses, evidently by beauty and loveliness presented to the sight, or by a similar form and charm described by language, which by the hearing passes into so many objects of sight. Likewise by objects of the three senses of touch, through kissing, embracing, and many other acts. Thus love progressively increases. In this venereal affection, because it is pleasing and the first of the alluring affections, the brain itself or the common sensory is expanded and joyfully trembles; whence the animus is diffused. The sensories themselves, and indeed the internal motors, are determined into that state in which they call forth and draw out the whole spirit, which thus far lies inclosed in the blood, and they promptly pour it forth through their own medullary fibres and through the nerves of the body. The intellectory affords in abundant measure new life and spirit; for in this state is conceived, born, and copiously put forth this spiritual essence which is to serve the new offspring to be conceived. A state similar to that of the brain is felt in the whole body and in its sanguineous and fibrous systems, which unanimously conspire to the same effect. For whatever animus the brain has is diffused into the body; besides all the other ways of transpiration are opened and an abundance of effluvious breathings flows out into and breaks forth through the whole circuit of the body. For these reasons, after the effect arises lassitude and torpor; for all the better blood is robbed of its own spiritual essence; also the purer flows to the sensories in order that in the fibres and through the fibres it may at length be discharged into the members of generation. Even the fibres themselves are fatigued in the act by tremulous vibrations. The intellectory pours forth whatever vital spirits it possesses and conceives: for

the whole expends itself upon the new man, who is to be as it were he [the progenitor] himself, and through whom he may preserve himself and his life, and pass through all the ages of the earth. At the same time through the opened pores of the skin the better and superfluous ejected exhalations are put forth, and hence are experienced the delicious ecstacies and pleasureable swoons of the interior sensories, which nevertheless in older persons are followed by temporary impotencies and a kind of sadness, and a coldness of the blood. In the act itself, which is of the body merely, there is a pleasure which is permitted without the end of procreation but for the sake of bodily relief, since it is excited by the superfluous generative substance collected in the vescicles. As far as it is from the animus it is without end, and is merely desire looking to the pleasure of the body. For the animus from itself exercises all acts in the body without end; since it feels and acts, but does not perceive, know, or will; but when the love descends from the rational mind it deserves to be regarded no longer as effect merely, but as end. If it is regarded as effect or pure pleasure it is lust or lasciviousness, for then the mind descends into the parts of the animus. it is regarded as an end this is an indication that it descends from the pure intellect, since the pure intellect has regard to no effect of the body as an effect but as an end. The end is the multiplication of members of a terrestial society, the preservation of its own life through posterity, that it may pass into another self, then also the necessity of preserving the health of the body. the reason why brute animals act from the same principle and the same end, for their soul is like our pure intellect, and so regards or desires no spiritual ends but only natural ones, that is, no celestial society such as our souls have in view.

Venereal Hatred and Aversion.

(206.) There are those who from nature, and those who from principle or reason, have an aversion for venery. Those who from nature, or of their pure intellect, hold society and its multiplication in hatred, are characterized by pride and an excessive love of self. Those whose rational mind and animus are affected by no charms are almost all sad and morose. Those whose blood is harder. colder, and whose [animal] spirit and its generation too scanty to suffice for its proper use, are old before their day; and those whose organs of generation suffer from disease are impotent. But they who from principle hate all venery regard it as vile and not to be vielded to, and its use as an injury to the spirit and to the better life. Thus the principles [of this aversion] are either spiritual or natural. This is called chastity, and is the highest virtue.

Conjugial Love.

(207.) Love is a spiritual word, harmony is a natural word. These mutually correspond, for love and also harmony bring about conjunction, since those things which are in harmonious concord are conjoined of themselves and by their own nature. Genuine conjugial love not only effects the conjunction of two bodies and minds [animus], but also of two rational natures [mens]. The causes of love with the married are many, and indeed they all concur so far as nature can contribute to this. For there is the conjunction of the body which is confirmed and strengthened by mutual delights. There is a likeness of the lower minds [animus] whence arise the mutual desires of their delights. There is the likeness of their rational minds [mens], which are united more closely by living together. For the affections of the mind are changeable, since the very forms of rational ideas are acquired by use and culture, consequently their rational mind. Minds

at length in various ways and from innumerable causes coalesce. The principal cause is the intuition and desire of the same end, and that is the desire of offspring in marriage; afterward the mutual and unanimous love of both toward their offspring; and moreover, the consent of each to the other's ends, or to what one or the other desires, that is, that one condescends to the will of the other. In order that there may be a oneness in nature, the active and the passive concur. If one is passive as the other is active, then both are at the same time one. This is called a conjugal or conjugial pair. Nature also has ordained that the wife should be of a passive and the husband of an active nature; especially does liberty favour [this union], for liberty is the highest delight of the mind and the principal essence of every pleasureable affection, since there is the greatest freedom when the mind and will of one is that of another. It is as if the mind were left to itself for the sake of being communicated to the other. These and many other things affect and unite minds, indeed to such a degree that when venereal love and the pleasure arising from the union of the body ceases the union of minds remains; this also affects in time the pure mind itself or the intellectory, whence arises also that more intimate union which exceeds all union of the rational mind, and it becomes of such a character that it cannot be expressed in terms, inasmuch as whatever is derived immediately from the pure fountain or intellectory cannot be put in words. If also a spiritual end is similarly desired by both, the souls as to their operation are intimately united. Hence arises a celestial life on earth, and it is right to believe that the souls of both are to be united in the heavens. But such marriages and loves are not entered upon and perfected by chance, but by the especial providence of God.

Conjugial Hatred.

(208.) Hatred is the opposite of love; what love is cannot be known from itself but from its contrary, just as harmonies are not known except from discords. This is the reason why discords are inserted, that the mind may be affected the more pleasantly by the harmonies; but it is the task of science and of art to see that they be properly fitted together, and thus that the quarrels of lovers do not beget hatred. Genuine conjugial hatred does not immediately disjoin bodies and minds [animus] but it disjoins successively the rational minds [mens], which are changeable. Thence, as from their own origin, the lower minds [animus] are disunited, and consequently the bodies; then the desires themselves vanish with their delights. causes of hatred and disjunction are many. The principal one is a suspicion of unfaithfulness, which is called jealousy. When this prevails the love is not believed to be mutual: and on the part of the husband the offspring is not believed to be the common offspring of both, so the love of offspring does not join their higher and lower minds. Other causes are, disagreements in the various ends which are loved and desired by one or the other. This aversion is increased if according to the order of nature neither can obsequiously yield, but both must rule. So because the mind and will of the one is no longer that of the other. and both are deprived of that liberty which is the mind's delight, there succeeds in its place either servitude, contempt, or hatred. These and many other things disunite minds, and indeed to such a degree that when venereal love or love of the body shall have ceased aversion will spring up. These also in the lapse of time affect the pure mind or intellectory of each, whence arises undying and murderous hatred, and it becomes such as cannot be described. This is a hell on earth; and it is right to believe that the souls of each, like two furies or erinnyes, are to be tortured in hell. For such disunions and diabolical

divorces of minds do not arise by chance, but for the gravest reasons they seem to be permitted by a foreseeing Divinity. From conjugial love and hatred it can be concluded what the intermediate marriages are which partake more or less of the one or the other. For innumerable intermediate states are given, and they abound the world over.

The Love of Parents toward their Children, or Storge.

(209.) The love of parents toward their children, as to its origin and essence, is most distinct from other loves. Our mind and rational intellect are wholly ignorant of its origin, wherefore it is also called instinct, for it is in the mind by nature and of itself. It is common to the brute animals and the human race, and in the former very often is the more ardent, and so powerful that it conquers selflove, and gives courage to the timid. This is a species of sympathy, for whether it be one's own offspring or that of another believed to be in some manner one's own, the ardour is the same, equally in beasts and in men; and yet it is not reciprocated and mutual on the part of the offspring: wherefore the love is said to descend, not to ascend; for it is natural in the parent and acquired in the offspring. Other loves, as conjugial love and love toward friends, are insinuated into the animus by way of the senses, and from this into the rational mind. But this [parental] love is insinuated by the way of the pure intellect from the soul into the mind [mens]; therefore its origin and whence it flows is unknown, for whatever flows down from the pure mind into the rational mind is not revealed to our internal sensory, for this purer mind is unable to explain itself in the forms of words. This is the reason why, whether it be our own offspring, as was said above, or that of another, provided our rational mind is persuaded that it is its own, the love is the same. From the effect of this love it is clearly seen that in us the ra-

tional mind is something superior and purer which regards and at the same time desires the more universal ends and those toward which universal nature conspires. ends, which are purely natural and common to brute animals and to us, cannot be other than the propagation of the race and of a new society, and the prolongation of terrestrial life through others in whom it is reborn. For it endeavours to form a colony from itself and pour all its own spirit into the new body, which fact the venereal love above described sufficiently demonstrates. This pure or superior mind most evidently knows that the soul of the offspring is taken from the soul of the parent; thus one soul is transcribed into many bodies. Of this our rational mind is indeed ignorant; but still this knows from the very ardent effect of this love and from desire that it loves to live most closely conjoined with its own offspring, and indeed to such an extent that it is displeased at not being able to be reunited, as it vainly endeavours to be through the closest embraces, clasping, and kisses. Thus in this love is concentrated the love of self, the love of perpetuating life, the love of society, of which it is a part and indeed the first part. In this love, with men, so far as it descends from the pure intellect, the love of self, of perpetuating life, and of society, is similarly concentrated; but so far as it descends from the soul, the mind [mens] of which is spiritual, the love of eternity is added, and the love of celestial society, a part of which is to be the entire terrestrial society. From these things as from living and existing proofs it is clear that the human soul is superior in essence and form, and that the soul of brutes is such as is our pure intellect. This love of parents toward their children decreases with the advance of time, more tardily in the human race, more rapidly in the various kinds of animals. For every offspring puts on and acquires its own countenance, its own animus, its own rational mind, not like that of its parents. Thus by nature they are dissociated as soon as the new brain assumes a relationship to

its own body. But because the ends which are desired are distinctly perceived in human minds, a love remains so long as it is the love of an end; which is also the reason why the love of parents becomes still greater toward their grandchildren. For that the soul of the grandfather by means of the parent even passes into the grandchildren is evident from the revived likeness in the grandchildren of the grandparents and great-grandparents.

The Love of Society and of Country.

(210.) There are smaller societies, greater societies, and greatest societies. A small society is a home or family; a greater society is a province or sovereignty, a kingdom or empire; the greatest is the whole world. Terrestrial society is called the world, just as celestial society is called heaven. There are as many worlds as there are terrestrial societies, and there are as many heavens as there are celestial societies. The love of society is both natural and acquired, for to live alone or to live without society is not to live, for whatever is one's own is not known as one's own except from others, or relatively. Our inmost delights are not delights unless from the delights of others we are convinced of our own. Moreover, no desired ends follow without the means; thus ours do not follow without our friends and their assistance, neither those of our friends without the consent of that community of which we are parts. Thus nature herself begets and induces this love and conjunction. This love, while it is purely animal, is greatest for one's self and one's own, less for friends and least of all for society; but if this love immediately descends from the mind [mens] of the pure intellectory it is then most for society, less for friends, and least for self. The analogy is like that of the whole world to its parts or a part. But indeed if this love is spiritual, or of the soul, then the love of celestial society is above the love

of all terrestrial societies or the whole world, and above that is God who is love itself.

(211.) Our minds are rational, that is, at once natural and spiritual. Natural minds or purely animal minds prefer themselves to friends, these to society, and earth to heaven. Truly spiritual minds place themselves in the lowest place: their neighbour they treat and love as equals; above all they place God; and others intermediately in their own order. This subordination of self is the very excellence of our minds; this is true magnanimity, wisdom, honesty itself, virtue, felicity, religion. These are heroes of their own age, the very essences, powers, virtues, and stars of the world. The society of such is the City of God. By the prodigies of this love the Roman Empire flourished, wherefore by a singular providence of God the whole universe was subjected to it. Such men are born at this day, but are regarded as wonders. Everybody recognizes this as a naked truth. Who does not praise to the stars Ouintus Mucius, Horatius Cocles, Scipio Africanus the elder, Cato, Octavius, the Gustavi, and Caroli, and many others, and admire that something Divine which is in them? Who does not exalt such a nature and affect it [in himself] by placing himself in the last or in no place, if he would strive for the glory, favour, and applause of universal society? Thus it is the part of art for a man to feign, even for selfish ends, magnanimity, wisdom, honesty, virtue, religion, and to be a man above men, and this at the very time when he is putting himself in the highest places.

(212.) There are as many forms as there are societies. The whole human race or world constitutes a universal form, empires and kingdoms less universal forms, the dukedoms of empires and the provinces of kingdoms still less universal forms, families and homes the least. Every one is by nature bound by the love of that of which he is a part. Thus by a love of his own country before others, when these come in conflict, since in protecting its form he is protecting himself.

Love towards Friends, or Friendship.

(213.) All love is natural, but all friendship is acquired love. The love between husbands and wives is such by nature, but friendship is something acquired through mutual association. That sentiment which exists in parents toward children and in others toward blood-relations and married relations is love, but toward others not related by blood is friendship. Affection for country and society is also called love, so far as it is connate. Love exists between equals and unequals, but friendship between equals; the sentiment of inferiors toward superiors is not called friendship but veneration, which easily makes way for love, since the veneration of superiors is natural and is within every love. But there are many causes, natures, and degrees of friendship. It is a general rule that friendship is produced through a similarity of manners, that is, of dispositions [animus] and minds [mens]. The disposition [animus], which is the external state of the mind [mens] and brain alone, does not regard ends but only the pleasures of the body, and is not affected except by likeness of condition, age, sex, fortune, countenance, actions; whence the friendship thence resulting is that of infants, of boys, youths, even of adults who are controlled more by the disposition [animus] and by pleasures than by the mind [mens] and desires of rational ends. In these there is frequently the first attachment, for we judge from externals concerning internals. But friendship from rational causes is procured by those ends in which both unite, for from these the likeness is known. Thus as far as we desire ends so far we love those friends and companions who advance these ends: for ends and means, or all intermediate ends, proceed with equal steps. Ends are either corporeal and purely natural, or rational, or spiritual. The pleasing affections themselves are ends; thus they are honest ends with honest men, evil with evil men, friendships with those related by blood, and so forth. But in

friendship it is requisite that one should be the leader and the other the follower: if both lead there will be a collision, as among morose, ill-tempered, envious, and covetous persons: also the natures of friendships are various; there may be sincere friendship or deceitful friendship, even friendship mixed with hatred. Very often we dislike the animus of a person and his manners, but we love his mind and will, that is, the man himself, and vice versa. Sometimes we even desire not to live with a loved one but with one whom we dislike. Our principal affection and ruling love is the measure of our friendship toward another. Thus it may be seen how various is the material out of which friendship is composed. It ought to be a common rule that all should be loved and at the same time their vices hated; that is, that even enemies should be embraced with love, but not, indeed, with friendship. For love is natural, and of the pure mind itself and of the soul; while friendship is acquired, and is of the rational mind. The ends of the soul are spiritual, the first of which is eternal felicity. When several agree in these ends, they are regarded already as friends whom love alone binds. Thus there will be a love of souls however inimical the minds [mens] may be. Without this spiritual love there is no divine love; for through this alone are souls consociated, if aspiring to this one end.

Hatred.

(214.) Hatred is not an absence of love, but it is the love of evil, consequently the hatred of truth.* Hatred is both natural and acquired. Natural hatred is the contrary of love, but acquired hatred is the contrary of friendship. As love is a pleasing affection, delighting the sensories, repairing the bloods and animal spirits with new heat, light, and life, and restoring the single parts of the body,

^{*} See Envy and Revenge, nos. 267-272.

so hatred is an unpleasant affection, which grieves the sensories and disturbs the bloods and animal spirits, depriving them of their better life and destroying the several parts of the body. The lower mind is then in anguish, and the brain compressed; it is exhilarated, rendered serene and expanded alone by misfortunes [of others]; just as love is a conjunction of dispositions [animus] and minds [mens], hatred is their disjunction; and as love is life and heaven, hatred is death and hell. Disagreements, discords, and disharmonies arise from hatred. The highest joy of the most intense hatred would result if heaven and earth should fall. But there are many causes, kinds, and degrees of natural and acquired hatred. The causes of natural hatred proceed from the state of the pure intellect and soul. since there are as many diverse states as there are souls and intellectories. For there are spiritual essences and forms more perfect and more imperfect, best and worst. In these love and harmony dwell, and in those hatred and discord. Those in which love is are celestial essences. and according to the degree of love are nearer to the highest love or God and are more grateful and happy; but those in which hatred is are infernal essences, and according to the degree of hatred more remote from God, more ungrateful and unhappy. Acquired hatred, indeed, is caused and increased by a dissimilarity of dispositions and by a discord and collision of minds and of the desires and wishes which the ends themselves declare. All desired ends are pleasant to the minds; hatred is begotten of dissent, difference, and opposition. In order that love may exist one gives way while the other acts; and on the other hand, hatred arises by the opposition of one to the other. As the love of the end is the measure of friendship, so is opposition of end the measure of hatred. Other things concerning hatred worthy of observation are to be deduced from the description of loves, since hatred is contrary to love.

Self-love; Ambition; Haughtiness; Pride.

(215.) Ambition is not love, but is something superadded or an adjunct to love, which if separated from love. love would not be active but passive. We have seen that love is the life both of the mind and animus, for there is no such thing as mind nor animus without love. Ambition is indeed the force of this life or the ardour of testifying the love of the mind; thus the passive principle is love and its active ambition. Whence it follows that there are as many ambitions or kinds of ambition as there are loves. Thus there is ambition in conjugial love, in the love of parents toward their children, in the love of society, and in self-love. The reason why ambition is frequently taken for love is because love and ambition taken together constitute one's mind [mens], disposition [animus], or one's life. Now because ambition is joined to love, as husband to wife, and there are loves more or less perfect, or those which are virtues and those which are vices, so there are more or less perfect ambitions or those which are virtues and those which are vices, for ambition derives its essence and nature from the love to which it is bound or wedded. Ambition is a vice or is spurious when joined to self-love, but it is a virtue or is legitimate when joined to the love of society.

(216.) Depraved or illegitimate ambition which is joined to self-love desires the highest things, and the higher it climbs the higher it aspires, and it increases as it goes on. Especially does it desire the dignities, the supreme honours, the wealth of the world, even heaven itself as its subject. So the ambition of Adam remains deeply rooted in the nature of his posterity, and each as a child of earth desires in mind to occupy all heaven. He emulates the omnipresence of deity through his fame, its providence through his universal care, its omnipotence through his more than regal power; even also its omniscience, for he is ignorant that there is anything which he does not know, and so per-

suades himself that he knows everything. So ambition obstructs the way to wisdom and opens one to ignorance. Carried away by ambition, he does not regard himself as a part of the universe, but as the universe itself, at least thinking that the universe exists on his account: of which universe he is nevertheless the smallest part, and all the smaller in that he seems to himself so great. For ambition is joined with the contempt of everything outside of self, although this is cunningly concealed. In his own regard he is all; he burns at every word which might injure his dignity and glory, while he laughs and inwardly is pleased at everything which raises him even though it were to the stars. Such ambition is for the most part natural or connate, and it increases by the favour of fortune, which is an indication of the perverse state of the pure intellect, the form of whose intellectual ideas or truths is discordant and adverse to the order of nature; but what the soul may be is not for us to judge. This heat of affection in the rational mind is properly called ambition where there is a species of insanity joined to ignorance, for it admires and contemplates itself and its form in every idea. This ambition in the animus or in the common sensory passes for haughtiness, or in the body for pride, because it is the effect of haughtiness and an elation of the animus, and it shows itself in ridiculous gestures, supercilious bearing, affectation of titles, pomp of family, of friends, of servants, of horses, of garments decked with superfluous ornaments, and in many other things which provoke laughter. Such an ambition, because it is a force and an ardour, and because the affection itself in which it resides is a pleasing one, makes glad and expands the internal as well as the external sensories, the cerebrum, fibres, arteries, ducts, viscera, and the body; whence it is said to be puffed up and to inflate. Thus naturally it repairs and restores the condition when everything is favourable, and pours into it as it were new life. It is nevertheless only like a beautiful wax figure stuffed with vile matter. But if perchance it is cut off from

hope or fortune, it falls either into infantile crying, into silliness, into sorrow, or into insanity; for the ardour of the mind is either extinguished or remains only as madness. There are many causes, qualities, degrees, and differences of this vanity.

(217.) That ambition, however, is a virtue or is legitimate, which is joined to the love of society and country; this never begets pride, much less haughtiness, but humility and contempt of self; it regards self as the smallest part of the universe, and inwardly rejoices that it is able to perform so many duties. It desires and attempts great and sublime things, not on account of self, but for the public good; to itself it is nothing, to its country it is everything; if it desires honours, riches, or wisdom, it is that by these only it may serve the more. It turns away from that illegitimate ambition as from a disease. it is known from love or from end what ambition is. a mind indicates a most perfect state of the pure intellect, whose ideas are so many celestial truths, and at the same time a state of the internal sensory corresponding to the intellectory. So it is natural rather than acquired, for even if imbibed by rules it is rarely so acquired as to be constantly active unless it be continually deprived of its own natural ardour, and so accommodated to the influx of the higher mind.

(218.) But the loftiest or spiritual ambition, proper to the soul, is that which is joined to the love of celestial society. This sees its own glory and felicity not in itself but in the love of God and in His kingdom, which it earnestly desires to promote; it is humble, a worshipper of Deity, a contemnor of self, but in the degree it is less to itself, it is greater before God. To this end this zeal is granted to souls, and ambition to human minds.

Humility; Contempt; Lowliness of Mind [Animus].

(219.) There is a natural and an acquired humility; as also an internal humility or that of the mind, and an external humility or that of the animus and body. Natural humility arises from self-contempt.—whence it is an affection contrary to illegitimate ambition or self-love, and wholly united to love toward others, for which reason it is worthy to be called legitimate ambition: for as far as we recede from love of self so far do we enter into a love toward others as being all more excellent and higher than ourselves. Properly it is shown toward superiors, and thus it is a kind of veneration, for love toward superiors is shown by veneration, so that it is veneration itself. For this reason humility is a virtue; and if it is innate or natural it has its roots in the pure intellect itself; and if in the soul itself it is an evidence of love toward God, and so it is an annihilation of self, whence is the highest religion, adoration, and the imploring of grace. From the adoration itself, which is an act of humility, may be known the quality and quantity of this love. The reason why humility is proof of love towards others either in reality superior and more perfect or else so esteemed, is because it is natural, if we would have the love of another and his work influence us, for us to extinguish the ardour of our animus and mind and to reduce these to a kind of passivity; then the love of another is that which operates with our love, and is that active principle which should exist in love in order that it may be the heat of our life. Hence is it that humility is the cause of the conjunction of the minds of others with ours and the very origin itself of benevolence. Without this state of our mind Divine love could never operate upon us. Indeed spurious ambition itself through its own activity throws off every influx and entirely extinguishes it. No affection more approves of this virtue or covers it with praises, than vicious or illegitimate ambition; for this demands

humility of all because it prefers itself to all. On the other hand God, who demands this humility, not from love of self but from love of the human race, that we may be disposed to the operations of His love and for the reception of grace,—He does not demand glory for its own sake, for he is in His own glory and Himself is glory, to whom nothing can be added through our glorification; but because the proof of glory is adoration, which is according to our veneration toward our superiors; it is by this that we declare our love.

(220.) Humility which is acquired does not derive its origin from nature and inclination, or from principles engrafted in our pure intellect and soul, but from principles through the reflection of our mind, drawn from our own experience or from that of others who teach us; and if we put faith in our masters, and ourselves acknowledge the truth as examined by them, there arises a principle out of which either virtues or vices are acquired. Thus if we are imbued with truths, especially with this truth, that illegitimate ambition or love of self is a vice and an impediment to the communication of the loves of another and particularly of a superior, then as far as self-love recedes so far does love toward others and that of others towards us, and thence humility, succeed in its place. This in the course of time, these principles being deeply implanted, passes over into the pure intellect and becomes as it were natural, and it is transferred to posterity, as if it were an inclination; and this is the origin of natural humility. This humility is called internal.

(221.) External humility is of the animus and body alone, and not of the rational mind; for self-love and spurious ambition can be implanted in the mind and the entire internal sensory, or our rational intellect can be occupied by this love, and nevertheless externally humility can be simulated, contempt of self, love toward others, toward society, even toward God, in a word, honesty and virtue; vices can also be simulated, the love of self, contempt of

friends, and many other things. Such humility is called external because it is outside of the mind, and as it were superficial. For the mind is a superior or internal animus. subject to which is the will, because the intellect, judgment. and choice are. The mind, to which the will belongs, is able to command the external or lower animus, and thence the body; and indeed by such art that it can cause that nothing of the mind shall show itself in the countenance, for, for every affection there are certain corresponding expressions of face, of bodily form, of gesture and of action. Thus the joyful expression of humility in the face of the lover and the beloved is as it were not each one's own state but that of the other. Veneration itself appears in the form of actions, in the accent of speech, and the style of language, as a certain yielding and obedience. But the deepest humility breaks out even into tears, or into a pitiable condition of the body; we are prostrated; we cry out that we are as nothing, and beat upon our breasts. These are the natural effects of humility in the body, and it spontaneously flows forth in this manner when verily present in its signs; but all this we are also taught to feign.

(222.) Lowliness is of mind or of spirits is a virtue as well as a vice. It is a virtue when humility is acquired from principle, or when self-love and spurious ambition are expelled from our minds; for then there succeeds at once an ambition of serving and obeying others or of suffering ourselves to be controlled by others.

Both self-love and ambition or this animus are cast down by sicknesses, disease, misfortune, anxieties; but these are of the Divine providence. Lowliness of mind is, on the other hand, an evil when it arises from a sudden extinction of ardour or of a spurious ambition, the self-love remaining without its ardour or without the possibility of acting. Then force or violence is done especially to the internal organs and thence to the external ones, and those of the body, and there is a breaking out into weeping, despair, frenzy, grief, disease, insanity, and madness.

Hope and Despair.

(223.) When we strive for and desire what we love, and yet impossibilities interfere with our attaining our end. we call this state of desire hope, and it seems to be in the will viewed as an endeavour which these obstacles are preventing from coming forth into act and motion. hope is not an affection of the mind, but of its will. the will always endeavours to act, but so long as it is resisted does not act. Meanwhile it is affected by a certain hope, so that it remains balanced between action and inaction. Thus hope does not belong to the animus but to the rational mind, because to its will, and so belongs to man and not to brutes and irrational beings. Hope increases and grows just as far as the impossibilities, that is, the resistances, recede or are removed; and to remove these is the work of prudence and skill. But hope in itself is greater or less according to the degree of the love and desire of the end pursued or desired. Therefore hope has in view desired ends, and accordingly it belongs to all the affections which are ends. For this reason hope is the continuation of life, that is, of loves, and of their ardour or ambition. But the greatest hope is that which we repose in God, to whom nothing is impossible: wherefore hope is one of the three spiritual virtues.*

(224.) Despair exists when we cut off hope; then also when, in the end itself, love and ambition, that is, the life and ardour of the mind, collapse and are as it were extinguished. Then comes that dejection of the animus the effects of which were described above. The effects in general are different species of insanity which are diseases of the mind, different frenzies which are diseases of the animus, and different sicknesses which are of the body.

^{*} I Corinthians, xiii, 13. [Tr.

The Love of an Immortality of Fame after Death.

(225.) The love of an immortality of fame, or as it is commonly called, of one's name, is natural to every one, as appears from innumerable proofs. Who does not desire funereal pomps and obsequies, and provide for the erection of a tomb to remain for a monument after the death of the body, for the sake of his name? Who does not rejoice at the imagined talk and whispering and is not affected by its flatteries, as yet all unknown, when it shall be said that "he has gained an immortal fame, and has merited the favour of posterity?" Nay, he himself would glory and all the world applaud him as if instinctively, if he by saying so could persuade them that he did not study to serve himself but posterity; from thence comes the glory of a great man.

From these and very many other proofs it is plainly established that the love of our immortality or fame or name is an implanted or connate one, hence that it is one of those truths which are within the pure intellectory. Unless the pure intellect and the soul were conscious of this, such a love could never exist in a rational mind, and because it does exist in it, it follows that it is the truth that we are to live after the death of our bodies. But our rational mind does not take this form itself, since it is ignorant of the true origin of this love, denying even its existence, and indeed those minds more ardently which regard, run after, and desire only natural ends; for something natural as well as something spiritual is within our rational minds, and the one predominating suffocates the other. Still this truth remains, as a spark under the embers when these persons [come to die and] desire illustrious obsequies.

(226.) But this love with its peculiar ambition is supereminent, and is either a virtue or a vice; it is a virtue when it obtains a name immortal in virtues, in honesty, in praiseworthy deeds towards society and country; and

still greater when not only toward present societies but toward all future ones. For if there is an innate love toward societies and country it must be that that which extends to all posterity is a greater one. Such a love or virtuous ambition, when it is united to our love of self, is pure love, if one does not desire that his name may live, but rather his service and thence his consequent public usefulness may. Such are the heroes of the world; for they spurn all glory of deeds and merits; they are even averse to these; but they rejoice from their inmost conscience that they were means of their country's felicity and safety, and that heaven above and God and the eternal essences may be conscious of their deeds, to whom in a kind of spiritual likeness they may draw near. Also such souls, the body having perished in death, are allotted a certain heaven, not alone in themselves, but also without themselves, from other souls with whom they cannot but have immediate communication of spiritual affection. Concerning these things faith itself and reason itself refuse to doubt; but we will treat of them elsewhere. Such internal men despise, yea, are averse to this fame of name, such as is indicated by monuments, palaces, buildings, statues, amphitheatres, inscribed titles and other like things; for they aspire to what is higher and to that with which these things are not to be compared. But such a love is a vice when it is in reality extinct, and nothing remains but what is feigned in order that one may instil into the credulous public an estimation of his deeds by a certain sincerity or truthfulness; or where self-love or spurious ambition is supereminent. In these persons the love of fame naturally rules. but the end is that of the fame of self not of virtues, like that in him who burned the Temple of Diana of the Ephesians. But without this love no one would love his offspring. for he would not behold himself as united in it: neither would any one fight for his country from a kind of love, nor seek death nor love to offer himself a sacrifice. From such an incentive comes true heroic virtue, such as was exhibited in our Gustavi and Caroli. The Divine Providence conspires as far as possible that these may obtain their wish.

Generosity; Magnanimity; what the Loves of the World and of the Body are.

(227.) The animus is called generous and great in the degree that it is elevated from what is mundane and corporeal, and so nearer to the celestial and divine. By the animus is here understood the superior animus or mind, wherefore also this animus is called divine. This regards the corporeal and the mundane as respectively nothing, because they are mutable, inconstant, transitory, perishable, void of life, to become as nothing,—mere instruments of life, to which is assigned a reward according to service. But the celestials are regarded as the only, the sole essentials, the very things which are, the perpetual eternals, the very felicities themselves.

(228.) Mundane in a strict sense applies to the earth and the universe, with its orbs, moons, sun, stars, then especially all things which are in the earth and its three kingdoms. Even human societies are called worlds, and every individual in the society a microcosm. mundane things also, those riches, possessions, and other things of the earth, which in it are but clods but in society pass for the goods which are the servants of life. But corporeal things are those which allure only the body and the animus, as the sensations of touch, taste, smell, hearing, sight, or all their pleasing affections; then also dignities and honours and other things which are taken no notice of, when alone the pleasures of the body and the animus are sought after. These are called loves of the world, cupidities of the animus, and pleasures of the body, because the blood and external organs are affected by them. Our rational mind is like a balance between the corporeal and the spiritual, or between the mundane and the celestial, one arm of the beam being that of the

body and animus, the other that of the pure mind and soul. If the weight of the corporeal arm prevails, then the spiritual and celestial are almost of no weight, thus their scale is elevated; but if the other arm prevails, then the mundane and corporeal are of no weight: thus we are balanced between heaven and earth. The weight of the corporeal arm naturally prevails because we are conscious of its delights, or we are manifestly affected by a sense of them; but in the celestial arm there are no weights, but only forces, and if they prevail it will be because their delights are ineffable, infinite, eternal, and are inmostly within the aforenamed weights; thus from the idea alone of their supereminence.

(229.) He who is magnanimous scorns in his spirit and mind alike all mundane and corporeal things, estimating them alone from their use in promoting those things which are superior. Thus he values the taste, not on account of the flavour but because by means of the flavour he discovers the quality of nourishment and enjoys an appetite for it; he enjoys the modulations of song, musical harmonies, sweetly spoken words, and like things, not for the sake of the affections, but because they recreate the body, and preserve the health of the mind. The pleasures of the fields and meadows, of colours, of the starry theatre of the universe, are prized not as delights in themselves, but because they exhilarate and renew the mind and give to it the faculty of understanding, and the material for forming universal judgments out of particulars and thus determining essential truths, and also for admiring and adoring the Maker of such a world. Riches and possessions are valued not as ends but as means to higher things; so also dignities and honours. He who regards all these things as mere servants and instrumental causes, in themselves dead, and who only venerates the higher things abstracted from them, is magnanimous; and because he proves this by his acts he is generous. For universal nature is so created that as an instrument it may serve life and the spiritual essences to whose rule it is wholly subject.

(230.) This love and this ambition show who is magnanimous and generous by nature; also the magnanimity and generosity themselves indicate the quality of this love and ambition.

There are in general two loves, the love of the body and the world, and the love of heaven and Deity. Love of self and spurious ambition reveal the love of the body and the world, while contempt of self or love of serving the public, and genuine ambition, reveal the love of heaven and of Deity, even to the smallest thing which lies in the way thither. From these loves it may be known who is really magnanimous and generous. But there is a magnanimity and generosity feigned for the sake of being made the means of corporeal and worldly possessions.

(231.) Thus magnanimity is not any affection, but rather a quality of the animus and mind. From these things it may be judged what the animus is and to what loves it inclines.

Pusillanimity and Folly.

(232.) Pusillanimity is opposed to magnanimity, and is so called from this opposition; but as opposed to generosity it is called folly. Pusillanimity has no right of its own, nor sufficient intellect to enable it to assert its mind, but is inconstantly borne to this side or that wherever its lust, its presumption, or the persuasion of others may draw it. Even if it should remain a moment in higher things it would fall back at once into the lower and be plunged into its mere bodily living. Folly, however, spurns entirely the higher things, and embraces the lower with all its animus and heart, and considers these as the only and the all, and indeed as the very entities of reason. Thus it is characteristic of a purely animal and brutish man.

Still other things may be deduced on this subject from the above description of magnanimity and generosity. Avarice.

(233.) Avarice is the love of riches and earthly possessions: but its quality may be recognized from its end. It is natural to love wealth, as it is to love those ends to which wealth is the means. Wherefore it is natural to brutes, even to insects, to collect and put away the necessaries of life for a coming winter; and because money is the universal medium for promoting and acquiring intermediate ends it is called the nerve of business. not avarice, but prudence for providing means, or a human providence granted by God, especially if the love of means does not exceed the love of the end. Often, however, it goes beyond. For worldly and corporeal loves never halt in their march, but in all directions they seize upon new growths, as the love of dignities, of honours, of ruling, the love of vanity, display, haughtiness, the love of pleasures, the love of looking out for one's own, not only during one's own life and that of his children but even to that of grandchildren; since the storge inspires a kind of perpetual life which increases toward the remoter generations. In a similar degree increases the love of riches, that is, of means to the perpetual end. There are also superior loves which wealth serves as a means, such as the love of agriculture, of defending one's country, of preserving society. Wherefore the greatest care of a ruler is that his kingdom may abound in money. Wealth may also serve as means to certain spiritual ends, as in performing works of charity, in lending aid to the needy, in promoting and propagating divine worship, in building temples, and in many other things. Now because money is the universal medium of so many and almost of all ends, and as each person has his own loves, desires, and ends, it follows that the love or estimation of money rules throughout the world.

(234.) But, indeed, if wealth is sought not for the sake of ends but for its possession merely, that is, not as means

but as the end itself, then this love is that avarice which is called sordid, and is folly itself, the trait of a base mind. It is against nature itself and against the principles of all reason that wealth should be regarded as pure end, for that which in itself is means cannot be the end, and this is the reason why money is regarded as the very possibility of all ends, consequently as being all loves in potency. For the mind is more delighted in the contemplation of its loves than the body is in their execution or in its pleasures themselves, since the view is more lasting and constant, while the pleasure itself is inconstant and ends with the act, as in venereal love; wherefore pleasures are ascribed to the imagination, for the life itself of the mind flourishes from similar loves. Besides, in avaricious minds all these loves remain, because of the possibility of all things [which wealth promises]; and by these loves there is aroused a universal idea which is more pleasing in that it is the more universal, and this appears to be the cause of avarice. This is confirmed by the location itself of this affection, being in the rational mind only, since it is not an affection of the superior mind, as it is never natural, but one that is acquired in the course of time, and that increases in old age just in the degree that the corporeal loves recede. It is not an affection of the lower mind [animus], because it is not of the body; the cupidities of the animus and the pleasures of the body being inseparable.

(235.) But to what an extent avarice may become a mental disease, insanity, irrationality, and niggardliness, is fully evident from its effect, in that the more completely it is inrooted the more are other loves blunted and extirpated; for the mind occupied by this perpetual idea is as it were suffocated, is merged not in the body but in the earth, so that it cannot be elevated toward the higher things, nor can the spiritual inflow into what is grossly natural. Thus the god whom the avaricious man worships is like Pluto himself, for the worshipper adores that

he himself may be blessed, that is, that additional riches may be given him. But in mind he worships his treasures as a god; in these he recognizes all possibility, providence, power, and glory; and so he in secret wholly denies the divine. From the mind of a miser all love of society is wholly rejected, likewise friendship, and even the love of one's own, which is nevertheless an extremely natural love. Even the love of the body hardly remains, because this is the love of the earth, and all cupidities are spurned because they are pleasures that cost; also honours and repute of name are of no account to the miser, since he persuades himself that he possesses potentially all the honours of the universe. Thus the love of self is supreme, for he regards himself as the [whole] universe and not a part of it. Thus he places among the virtues nothing but vices, such as injuries done to his neighbour, plots for reducing whole homes to extremities, and innumerable similar things.

(236.) These passages are to be amended, as the subjects here treated of have not been deduced from their origins.

Prodigality; Liberality; Contempt of Wealth.

(237.) Prodigality arises from various causes. For a prodigal either desires his ends too much, or he desires none at all; or he regards the present only and not the future; or he denies that riches are a means for attaining ends; or he believes that they produce themselves spontaneously; or he desires to exhibit a generous spirit; or he despises wealth as provocative of evil. Thus prodigality is both a vice and a virtue. When it is a vice it is properly called Prodigality, but when it is a virtue Liberality, which is a kind of enerosity and magnanimity, and when the virtue is supereminent it is called the Contempt of Money. Prodigality is of the animus but not of the natural mind; so it differs altogether from avarice

even as to its origin. That it is of the animus, and not of the mind, is evident from the genius of the prodigal: for he does not care for the future but for the present. and he lives for the day, or he longs for pleasures of the body too much as ends, and so he indulges his disposition or animus and cupidities alone. Or, conscious of no burning desire of an end, he is like a dead stock, weakened in mind; or like boys growing up, he does not know that wealth should be acquired with care as the general means to ends. All these things indicate that the animus is the prodigal, and not the mind. Liberality is also either a vice or a virtue, for it is for an end, and the end qualifies the means. It is a vice if it is for loves of the world and the body, and thus for ostentation. It is a virtue if it is for superior loves, as for the works of charity: thus they regard wealth as mutually received, as committed to their charge, as to be dispensed and returned. contempt of money, if it is not feigned, is a supereminent virtue, for the contemnor turns away from money as he would from the vices and evils to which they are the irritants and perpetual allurements, for the possession of wealth can never be separated from the idea of those delights and pleasures of which it is a means. That which is to be and can be, the mind regards as though present and being; thus all loves of the world and of the body are worldly and corporeal in the idea, as though they were in act. The possession of wealth in this way perpetually irritates and is a universal decoy, and so the mind descends and buries itself in all natural things, worldly and corporeal, from which it is impossible to be elevated to higher things, celestial and divine. If money is despised on this account, such contempt is as was said a supereminent virtue.

Pity and Charity.

(238.) There are some who are compassionate from nature, some from use, some from purely moral causes, and some from principles of the reason. Combassion from nature, or what is the same thing, from the pure mind and soul, flows forth toward others from an innate love, so that it coincides with love itself, of which it is the first effect, another form of charity. For love regards another as itself, and so it pities others although it may be deserving of pity itself. Love toward husband or wife, children, blood relations, that is, one's own, produces pity, and this, charity, which extends itself as far as the love. Love toward society and country, and the more universal love toward the human race, and that which is most universal, toward the human race past and future, a purer and more perfect love than the former, produces a pity and charity toward all who from this love are spiritually called neighbours, while naturally they are nearer or more remote, since nature alone admits of degree. Thus pity and charity are not joined to self-love and spurious ambition. whence these are virtues of virtues. Such a love cannot be given without its effect; consequently from charity and pity which are effects it can be judged concerning love, thence concerning the state of the mind and soul.

Pity from use emulates pity from nature, for it passes as it were into the natural, since with the passing of time it imbues the mind with the principles of love. This properly is a moral virtue, because it is within the will, not of itself, but of ourselves, to which we contribute as so many instrumental causes through application to the influx of the principal cause.

Pity is conceived also from purely moral causes, and is acquired through use, and thus born, it may be, from principles of virtue and piety; but this pity supposes a faith not intellectual, and thus is insinuated from obedience through use; for faith is something that is not in our own power.

Pity from the principles of reason, whether from a spurious or legitimate love, is derived from a spurious love, that is, from the love of self. He who is a lover of self is never compassionate, for he does not love others as he loves himself. Nor does he who hates ever pity him whom he hates, for no one hates another as another unless he loves himself, that is, unless for causes which oppose his self-But notwithstanding, the external works of pity can flow from the principle of this same love of self, so indeed that one may seem kind, compassionate, and a lover of others, for he knows that it is a virtue, wherefore his self-love stimulates him to appear such and acquire distinction; or also from the principle that others may pity him if he should happen to be an unfortunate; then indeed he exercises charity toward those who are wealthy that he may be rewarded, but this is without pity or love.

Pity from principles of legitimate love supposes an intellectual faith, or that from persuasion one knows pity as the effect of pure celestial and spiritual love. The principles of the mind are [regarded as] so many rational truths, for everyone believes his own principles to be truths.

- (239.) The effect of pity is in the mind anxiety, in the animus sadness, and in the body weeping, and at the same time a pitiful voice; the image of pity also stands out in the countenance. Thus the effects of pity and sadness coincide; but it is such that one suffers as if this sadness were his own, for he whom he pities is his other self.
- (240.) The objects of pity are innumerable. Poverty and unhappiness are general objects. There are also those persons who pity the opulence and celebrity of others, regarding these things as causes of misery and incentives to vices. Everyone pities the avaricious man. There is poverty in worldly, intellectual, and spiritual things. What poverty in worldly things is, is known; poverty in intellectual things is ignorance; a hallucination of principles

or of opinions concerning truth is silliness and insanity; poverty in spiritual things is a feeble faith or total want of faith, a cold love or no love whatever of Deity, and so no charity from that which is the soul itself of charity. All these kinds of poverty are infelicities. But to judge of poverty and infelicity is of our rational mind whose choice and application are accordingly various, since there are as many minds as varieties; for with him whom we pity there always intercedes a certain correspondence of principles. Thus this application is not natural but acquired.

Fear and Dread.

(241.) Nothing is more natural than to protect life and its essence, and to wish to continue one's being, and to preserve that connection which, by virtue of form, one possesses. The soul, which is living essence, while it is united to the body furnishes this with sensory organs, that it may be aware of any attempt to destroy it. At each single assault which injures it, and at every disharmony, it is grieved, saddened, altered, and constrained. This alteration is called fear; for in fear the fibre contracts itself, and withdraws into itself: it becomes hardened and resists as if senseless. The blood is expelled from the arteries so that the heart palpitates. The animal spirit is expelled from the fibres, so that the muscles are deprived of their own motive force, the sensorial organs of their perceptibility. A chilliness and pallor seize the face and limbs. The animus deprived of its own cupidities falls extinct; in the mind is the image of death. Thus fear is a certain extinction of the mind and animus, and as it were an anticipated death of the body, for its appearance is seen in the body.

(242.) When the life of the animus and the life of the mind exist from pure loves because from affections, it follows that we apprehend, we fear, or dread the injuring

of each and every love, because they are ends of the mind; we fear also every love which is a means to or assists such an injury; thus all things which bring, as we believe, any deadly hurt. Just so far then as we love the end do we fear its privation and dread its annihilation. The same is true of the subject in whom is the end; for love cannot be given as an end unless it is in some subject.

(243.) And so all fear is natural; and it is as great and of the same character as is the love or end which we desire. There are loves both natural and acquired; but whether the love be natural or acquired, nevertheless fear and a departure from nature accompany each when the danger of its extinction or privation threatens. This nature is in the rational mind, to which belong loves, desires, and ends. For whatever the mind does not observe this it does not fear; and when it does fear the mind is no more master of itself or competent, but undergoes a kind of swoon.

(244.) There are as many fears and as many kinds of fear as there are loves and kinds of love. Everyone naturally fears for his own body, whether he loves himself before others or others before himself; the love of preserving the relation between body and soul is innate with everyone; where there is a relation of dependence of one upon another, there is love. He who loves himself before others also fears more for his own safety than for the safety of others. He who truly loves others more than himself, fears more for the safety of others than 'for his own; therefore from fear the quality and degree of love, and what love is, is known. He who loves his country more than himself considers it glorious to die for his country, or at least for the fame of which this illustrious glory is a part. He who loves his wife and children more than himself, suffers death rather than see these loves extinguished. This is also natural to brutes, as in the case of does, stags, hens, geese; for the female boldly

confronts the enemy which approaches her young. He who prefers fame to life is fearful of his fame or fears its loss. They are magnanimous who are fearful of the fame of honesty and virtue. Whence it follows that fear of the loss of a superior love renders bold the inferior love. He is a hero who fears no loss of the life of the body when fame is endangered, whose loss he would greatly fear. Also the same hero when his fame is not endangered, fears greatly for his own body, to the end that he may live for fame and for society.

(245.) He is without reason who prefers the life of his body to the life of his fame, or to honesty, virtue, society, country, and the human race; yet he is still more contemptible who like the miser prefers wealth and similar things to himself and his life. The most timid of all men, he is still an intrepid defender of his treasure, the deprivation of which often leads to suicide. The most despicable and the lowest of all mortals is he who fears nothing for truth, sacred things, heaven, and Deity, but only for his own life. Thus fears show of what kind the loves are, and which love is preferred to another. What love is and what the fear of losing the love of God, the martyrs have testified. Souls which are sublime and elevated above mortal things do not fear to undergo death for truth, especially such as is celestial and divine, because they are fearful for the truth and dread its extinction. But our truths, except such as are divinely revealed, are mere principles of the rational mind. To fear no danger of life or to meet death in defending these denotes indeed a sublime mind, but it may be also an insane one. Such are some of the martyrdoms of heretics and others which historians relate.

Fortitude; Intrepidity; Courage (Animosity).

(246.) Bravery is a heroic virtue, especially in war, and is manifested in battles, combined with intrepidity and

magnanimity. There are many kinds of bravery, all of which aim to be regarded as heroic. Common minds think that it is shown only in intrepidity and courage, but a genuine bravery shows itself always more evidently and boldly when the cause is regarded as greater, superior, more universal; and on the other hand it is more languid where the cause is meaner, inferior, and slighter. The bravery is greatest when intrepidity in the less cause is greater, and in the great cause is less. Insane persons, misers, and others of weak mind, who are terrified by the slightest whisper, also are bold in guarding their treasure; while in a public cause they are quite unnerved at the sight of a drop of blood.

(247.) Nothing more difficult is known than to discover whether bravery is genuine or false. bravery, whatever may be the cause, is never turned into fear, but in place of fear into anger, and anger then becomes zeal and a just grievance. False bravery secretly conceals fear. Externally and on the surface it shows the animus, and if it is turned to anger it is an unjust anger, grief, or fury. Genuine bravery is mild, patient, and clement even toward enemies; but the false is inflamed and breaks forth into cruelty. Genuine bravery is present in the greatest dangers of life, in the animus and mind, and it is the more present and prudent as the perils are greater. Then a false bravery in the animus either melts away or becomes a rage, and the person is insane like one who has lost his mind; he is beside himself, and no longer his own master. Genuine bravery is never united to self-love, but is the inseparable companion of the supreme love of many and of society with which love it increases. False bravery is from an opposite principle; for an extreme love of self inspires the immortality of fame, but whether it be from a genuine bravery or a spurious one is distinguished by this, that this self-love does not desire these goods of others and of society, but rather that it may seem to all the world to desire them; and thus from

the character of the ambition is understood what the bravery is. Genuine bravery is most closely united with humility, adoration, fear and love of Deity. But false bravery is united with pride, haughtiness, hatred, impiety, and with a contempt, hatred, or denial of Deity. The greater the bravery is the greater is the life; the less bravery the less life there is, even to the condition being comparable to death itself.

(248.) Intrepidity which is an attribute of fortitude is not acquired but is inborn. Hence it appertains to the race and descends to a remote posterity, for the brave beget the brave; it is often a trait belonging naturally to a whole people. For the intrepid does not truly fear the loss or the extinction of that love or that end by which he is lead, be it for life, for fame, or for country, but he boldly defends these; since his animus is roused and inflamed at any insults, and the more ardently as he is by nature the. more brave, but at the same time the more moderately in the degree that danger threatens, inasmuch as the intrepidity of true bravery is conjoined with presence of animus and of mind, and carefully discerns dangers as to their character, and takes council in the field, and thus acts either with ardour or with prudence, according to the state and the possibility of peril. But fear, which is the contrary effect and likewise a natural trait, does not rouse and inflame the animus at the presence of peril, but dejects and quenches it.

(249.) As fear and intrepidity also, since they are both natural traits, are inscribed in the very blood itself, in the spirit of the blood, in their organs, and in the body, so it also follows that intrepidity makes itself seen in the face itself, in the eyes, in the sound of the voice, in the respiration, in the strength of the muscles, and in the actions; especially it appears from the arteries of the body and the fibres of the brain, which are stronger and more robust in the intrepid than in the timid, since the strength of the whole body is in the arterial blood and animal spirit.

This is the reason why we ascribe to the brave a great heart and a great animus, which is [a property] of the brain. The force of this blood and spirit is excited from the inmosts, that is, from the superior mind or that of the pure intellectory, hence is a presence of animus and a sudden light suffused over the mind, a heat, and as it were a fervour of the blood, strength in the limbs, and a kind of foaming in the cheeks and glands. Such an example of bravery and intrepidity lived in Charles the Hero of the North, in whom it was an inherited trait, since he derived it from his ancestors, the Charleses and the Gustavuses. He knew not what that was which others called fear, and he laughed at all threats of death. So he lived the life which he is also still to live, far removed from death and superior to the failing life of the body. There is present with such souls a singular providence, because there is something divine in them, and it provides for them a life to which they do not aspire, even one that is immortal in the midst of the mortal.

(250.) That not all bravery and intrepidity is inborn, but that there is also a kind which is acquired, we see some to be persuaded from the examples afforded in those timid and fearful persons who sometimes act bravely, although not from their nature but artificially, and from the state of their blood and change of their spirits; for intoxicating drinks and those aliments of the blood which excite a fervour, even fever itself, mania and insanities frequently infuse such an animus and elevate minds to a seeming bravery. But this is not bravery but rather courage, which is merely in the blood, in the body, on the surface, and in the outermost parts, while still the fear lies hidden within, ready to return whenever this fervour of the blood ceases. From this courage also we may be strengthened in our conviction that bravery and intrepidity are natural gifts. For this courage is not excited in these persons until the nature of the blood and of the spirits is changed, and it ceases with the changing cause; while everything that is natural [or inborn], even if violently expelled, nevertheless returns. Their mind is also an inebriated one, rather than a rational mind in which bravery finds its springs, and as soon as fear returns, at the mere idea of the danger already passed, the heart palpitates, the blood rushes into the veins, the limbs collapse, and a cold sweat is produced.

(251.) But indeed, of those possessed of an innate fear, whose mind nevertheless is imbued with the principles of the virtues and with the highest loves, on account of which they vehemently long for a corresponding nature and hate their own which does not answer to these longings, there may be predicated an acquired fortitude, if for the sake of becoming fearless and brave they excite and inebriate the blood by the natural means just mentioned, regarding these as aids in resuscitating the forces naturally languid and torpid. This bravery is the greater moral virtue, in that it comes not into the mind of itself or instinctively. but from a recognition of the truth which one venerates in others outside of oneself and sees to be impossible in oneself except it be actuated by means. For whatever the mind does of itself is a virtue or a vice, but whatever it does not of itself but by nature, this is neither a virtue nor a vice until the mind has descended to participate in the act. But this acquired bravery never equals that which is natural, since it is inconstant like the mind itself. which is governed by principles.

Indignation; Anger; Fury; Zeal.

(252.) In order to understand what anger is, and what is its nature as compared with other affections of the animus, we must institute a comparison with those affections which are purely natural and obvious to sight. For a certain likeness appears which we recognize from the mere statement. It was observed above that love is the very life of the mind and the animus, for without love

there would be neither mind nor animus. In what followed it came also to be proved that the intelligence or the reason of the mind corresponds to light, and that light, clearness, shade, darkness, and other terms applicable to light are applied to the intellect. We have also observed above that ambition may be compared to heat, for love without ambition is as life without heat. zeal is to be likened to a kind of fire, for ambition without zeal is like heat without fire. When the zeal or the fire of the superior mind passes over into the rational or inferior mind, then it is commonly called ardour [excandescentia]; but when it passes into the animus and thence into the body, it becomes the corporeal and impure fire which is called anger, the flame itself being called fury. Hence it appears that the beginning of ardour, of anger, and of fury, is in the soul itself and the pure intellectory, in other words that it is conceived and born in and from these; thus that in its proper source, zeal or the pure fire is naturally mild, becoming active when truths, whether natural or spiritual, are to be guarded; but that it goes forth impure in its derivation; for when the mind grows warm it defends, as if with a kind of zeal, its principles by the love of which it is carried away as though by the love of so many truths, and it attacks the contrary, whence arise disputes and philosophical contests. However, that this ardour of the mind breaks forth into a certain fire or anger in the animus and at length into flame, in which the whole system or bodily principle is enkindled, that is, into fury, is apparent from the effect itself, for it is manifest in the sensible heat and fire, inasmuch as the blood burns, the viscera are heated even to the marrow, the membranes and extremities are inflamed, the respiration becomes harsh, the sound of the voice is hardened, as when the air is heated, the arteries swell as when the atmosphere is heated, both the internal and external senses are disturbed as though they were excited from their natural equilibrium into a turmoil of motions by some fire; also

the thicker coverings are brought together, or the fermenting substances moved from their place. Thus the heated bile, which lay hidden away in its gall-bladder, is poured into the mass of blood, by whose grains or hard particles the lighter and softer blood is excited, as by external stimulants, into a similar rage. Thus not even the least part is without its anger or heat.

- (253.) Zeal therefore is a natural affection with which the superior mind or the soul and the pure intellectory are furnished, in order, it would appear, that the soul may guard its spiritual truths, and the intellectory its natural truths, and oppose the falsities themselves which are contrary to these truths, with increased heat or with fire. For when there is a falsity and a truth, or a good and an evil, and also to both of these a force of acting, or a life, it is necessary that there be a zeal or heat even to the fire of act, in order that the enemies be brought into assault. This is the reason why zeal is attributed to spiritual essences and to Deity himself, who is described as actuated by wrath or anger, as also why when any one is heated and angered he ascribes this to a certain legitimate zeal for the truth or for the defense of a just cause. There would be no such affection unless there were an enemy; therefore anger is the evident proof that in the spiritual and invisible world there is some evil which is to be combatted.
- (254.) But our rational mind, which regards its principles as so many truths, is also said to be kindled with a certain zeal; still inasmuch as the very principles of our reason are rarely from truths, therefore this zeal is also rarely a pure one; the wrathful kindling thus originating is harsh and vehement, like ignited carbon which is consumed by its own fire. But whether the fire be pure or impure may be known from the love itself and from the particular affections and desires of the mind, especially from ambition, which is heat, and most immediately rouses this fire. Such therefore as is the love or the ambition such is the zeal or kindling of the mind.

- (255.) As soon, however, as this fire breaks forth from the rational mind into the animus, it is borne as if from a sphere of immaterial into one of material ideas and is called anger, for the animus is said to become angered; on which account its way inclines toward the body, which in accordance with the anger of the animus becomes warm, boils, bursts into flame and rages, since the whole animus is transfused immediately into the body.
- (256.) But indignation belongs only to the rational mind, and is the first degree of angry heat. There are, nevertheless, in indignation many elements which moderate, temper, and restrain it, lest it break out; for there is either fear, or some love, or shame, or sadness, which are so many reins and barriers to hold it in.

Patience; Gentleness; Tranquillity of Mind; Impatience.

- (257.) From anger we may know what and of what quality is patience, for where patience is there anger is not. In so far, indeed, as anger may be compared with a certain fire and flame, patience may be compared with a kind of cold; as anger with hardness (for indeed its elements as if brazen are hardened by fire), so patience with softness; as anger with the highest degree of activity so patience with passivity, whence the name itself is derived. Therefore patience is a tranquil, serene state of the mind, as it were free from the storms and commotion of the affections of the animus.
- (258.) Patience also, like anger, is written in the body; something mild and patient shines forth from the countenance, from the very sound of the speech, and so far as it appertains to the mind, from the discourse also. The face is serene, smiling, even while others burn; the blood is softer, healthier, warm but not burning, full of vital heat but not concreted into fibres; the pulse is lighter and more constant, the bile is not dark but more yellow in colour, the arteries more yielding, the fibres tender, the

organs more vigorous and ready to obey the dictates of the mind, and in all parts there is manifest a pleasing grace, if not beauty. In a word, each particular part of the body is patient; for as is the mind and the animus such is the state of the most particular parts of the whole body, since the latter conforms to the image and nature of its soul. If otherwise it is a sign that the mind is injured from some cause.

(259.) Patience, so far as it is the tranquil and serene state of the mind, free from disturbance by the affections of the animus, is itself the most perfect state; for the mind is, in this state, left to itself, has time for its own operations, regards its reasons more interiorly, and forms its judgments more sincerely, and out of these it selects the truer, the better, and more fitting, and remits them into its will, which then is not possessed with the tumult of natural desires. Thus enjoying an almost perfect liberty, it holds the animus subject to itself as if in chains, nor does it permit it to wander beyond the limits of its own choice. Thus also it commands the actions of its body, and more purely and intelligently receives and contemplates its sensations. When the mind is thus left to itself, and neither corporeal or mundane things nor the heat thence arising disturbs its ease, then it enjoys the inmost fellowship with its pure intellectory or the soul, and suffers natural and spiritual truths to flow in; for it is only the corporeal affections and desires of the animus which obscure and pervert the intellectual ideas of the mind. Hence it is that the mind, in its state of patience or tranquility, is cold in its constitution as compared with the heats of the animus and thence of the body, but very full of love or of the more pure and perfect life. For that there be any mind it must be warmed with a certain love, but the purer this is the purer is the mind, because the better is the life. From this state the mind regards the lower loves and those purely corporeal as infantile sports, or as insane, and the more so as they are believed to be wise. Thus witnessing these it does not become heated and angered, but it pities, condoles, pardons, tries to amend, rejoices in its success, bears its injuries as a mother those inflicted by her child; for it embraces all in its love, while it hates vices. Patience, therefore, may well exist without anger, but it is not without its zeal by which it defends, although with moderation, its truths. The mind is never disturbed by such a fire, still less extinguished, but is refreshed, for this agrees with its nature. For the rational mind, the more it is liberated from impure fires the more it burns with the pure fire which is mild and does not rage, but restores its state.

- (260.) Such patience, which is the moderator of the passions of the animus, is rarely inborn, for every one has an inclination to certain affections of the mind; but with age and with the judgment it grows, and especially is it perfected by its own exercise; but that which is genuine does not exist without the truths of religion and the principles of piety, nor without violence done to the natures of the animus and the body. Misfortune even, and sickness, which repress the fervour of the blood and the spirits, are also frequently the causes of this patience.
- (261.) The character of impatience may be inferred from this description of patience, for it is of the rational mind, which desires ends, while the end is hindered or obstructed by intervening obstacles or by the ideas of impossibilities, which are so many resistances, lest the will should break forth into acts. Hence the animus which desires is tortured, and the body is distressed and the mind regards single moments as long delays. Thus the more ardent is the animus the greater is the impatience; the more tranquil the mind, the less it is. Least of all is the impatience of those who commit their fortunes to the Divine Providence.

Shame.

(262.) In shame both the internal and the external sensory, as also the single fibres and single arteries, contract themselves, since whatever is the state of the sensory such is that of the fibres and consequently of the arteries. Thus the spirit is expelled by the nervous fibres into the motor fibres of the arteries, and the blood from the larger arteries into the capillaries, whence arises a redness and inflammation of the face, dropping of the eyes, a hiding, a stupor of the sensations, cessation of breathing and of the determinations of the will, or inaction. For the sensory itself, being compressed, does not dare as it were to lift itself, but withdraws into itself so that the mind may hide itself, not only from others but from itself; since it is the shame of self so far as the mind itself is conscious of anything indecorous, dishonest, or criminal. Therefore when no one except the mind itself is aware it is rarely ashamed, unless with regard to the fact that some other may know [the cause of shame]. Accordingly, without committing any crime even, the mind may be suffused with shame reflecting on the possibilities of its happening, or on something noticed which it alone knows. Shame belongs to the brave and the timid alike: in the brave the face blushes, in the timid it turns pale, for the fear of some injury or loss ensues. Shame also lets down the muscles of the face, so that they are without any determining force like that of the pendulum.

(263.) There is this other difference between fear and shame, that fear causes the internal and external sensories to fall lifeless and insensible of themselves, but that shame, of its own will and by a native force, contracts its sensory and takes away its faculty of changing its state; wherefore, in that moment, before it recollects itself, all determination of will ceases, and there follows an oblivion or forgetfulness of particular things.

(264.) Shame increases according to the sincerity of

the mind and its love of what is honourable; for then it fears to sin against the rules of honour or against the rules of the decorous, which it believes is the honourable. since there are those who do not well distinguish the decorous from the honourable and therefore are affected with the shame of both. But inasmuch as the honourable declares itself through the decorous, since the decorous is the external of the honourable, therefore we are careful to observe the laws of both. Shame is greater in the presence of superiors than of equals, and there is none in the presence of inferiors except the mind be a greater lover of the honourable. Shame is greater also in the presence of those we love and venerate; but when the love is mutual and in place of veneration pure love succeeds, there is as it were another self. The shame then is none other than one feels of one's self alone. That is a sublime mind which feels shame even in no one's presence, a proof that it is led by veneration toward the truth, toward honesty, toward justice, and the other virtues, and regards these as being themselves its own superiors.

- (265.) There is little or no shame in those who scorn and are averse to virtue itself, and who esteem no one as their superior, as also in the stupid and dull of intellect. Wherefore the lowest of men, without conscience, without love of honour, are those who feel no shame, who are possessed of a most criminal intent, and who in the presence of crimes which they are conscious of having committed or of being about to commit stand with open and lifted eyes, or as exhibiting no spark of the higher mind within.
- (266.) But inasmuch as principles regarding the honourable and decorous are somewhat various, the sense of shame also varies somewhat, one person not being affected with the feeling of another; thus these senses of shame take their turn. We are also affected even with the shame of those with whom we have had no acquaintance; which comes from its being reflected from them upon ourselves,

and thus from a certain friendly relationship which we sustain with all of our race.

Envy.

(267.) Envy is hatred mingled with anger, but the anger lies concealed like fire under the ashes, wherefore it is an inmost consuming heat which when it breaks forth causes insanity. Hence the blood is suffused and heavy with bile, thick, full of flecks, of obscure colour, stagnant in the least pores, whence comes the blueness in the face. This same fire also consumes and scorches, and this causes leanness. The gall bladder is crowded with the black bile, because of its continually spouting forth anew, and this is mingled with the blood. There is also a darkness in the countenance, hatred mingled with anger gleams from the eyes, where there is no light of joy, and even in the voice and speech something harsh is perceived. The animus is always obscure, and the mind sad; it is rarely lightened and exhilarated, for it perceives nothing of the sweetness of harmony. The very state of the mind is a discord, wherefore it loves disharmony as harmony. Thence the very misfortune, poverty, and miseries of others are what soothe and gratify it; nor does it rejoice in its own good fortune or happiness unless there lies hidden even in this something of revenge.

(268.) Particular envy is common to all, and most natural, for it is found even in little children, and in brute animals and their young. For example, we envy in another that which we ourselves love, as a lover the bride, and a competitor the honour of his rival; so in other things, the envy never extending beyond the limit of that which we love and desire.

But a general envy arises from the supreme love of self. It envies all people, all things, and each one particular thing; it imagines the universe its own and for itself, and itself as the whole and not a part. It envies others their heaven; the devil envies even Deity his power. Thus at heart it is the enemy of all. But he who is not a lover of self, but generous, is not envious. From the description of hatred and anger, if these are compared, still further particulars may be derived [concerning envy].

Revenge.

- (270.) Revenge flows from hatred and envy. Hatred indeed is the contrary of love; but it is not the privation of love and thus of life. It is rather a contrary love, and especially a love of the evil. For there is a love of the good and a love of the evil. One is contrary to the other, hence one hates the other. Thus in hatred there is a life, and if life there is also heat and fire, but that which is grosser, more impure, hence natural and corporeal. It resides in the animus and not in the mind, unless the mind be united with the animus of the body. This heat of hatred is called the lust of revenge, and if anger ensues such as is that of envy, then it becomes fire and vengeance. Thus the lust of revenge is the very fire, the active principle or highest degree of the activity of hatred or of the love of evil.
- (271.) As envy is particular and general, so also is revenge and its lust. Particular envy is natural to all, and is the lust of revenge, thus it is inborn in tender infants before the age of reason, and in particular animals which are even by nature furnished with weapons for defense against injuries. And since revenge is natural it is also naturally pleasing, since it clears up the sad mind and clouded animus, refreshes and restores it to its natural condition, hatred being dissipated and envy extinguished. The pleasure of revenge is according to the degree in which hatred and particular envy had existed; but the desire of revenge is for the most part accompanied with sadness, unless the mind sees the possibility of obtaining its

end, although in some minds the desire itself exhilarates the animus.

(272.) The general desire of revenge is similar to general envy, for it arises from the same source, and thus similar attributes belong to both; the latter is always united with a spurious ambition or with the love of self. The desire of revenge is never united with true ambition or with the universal love of the good, unless for the sake of the extirpation of evil. For zeal and righteous sorrow give birth to revenge, but still in the desire and in the revenge love remains, for it wishes to destroy the evil in order that after its destruction it may revive the good. Such is the divine vengeance: but the greater the love the greater the desire of avenging evil, since love persuades to be like itself and to be united with itself. Whatever therefore, disjoins and hinders the possession of the desired good, love hates and devours, and eagerly seeks to annihilate; and this often is accompanied with anxiety, grief, and unhappiness in the subject.

Misanthropy; Love of Solitude.

(273.) Misanthropy is properly the hatred of the human race, or it flows from such a universal hatred; rarely from envy or from hatred mixed with anger, since this breathes vengeance, which presupposes life in society. Misanthropy is united with contempt or privation of a sensibility of the pleasure of the body or of the delights of the animus. There are misanthropes who do not appear such because they possess an animus desirous of pleasures which can only be indulged in company and in civil life, or by sociability. There are those also who from their esteem of reputation are unwilling to appear as misanthropes, but when once this desire and this love of fame ceases they become such. They are for the most part extremely given up to self-love. This vice is very natural and inborn, for it arises sometimes from the ill success

of some highest love, and thus from despair, since the highest love persuades that the only thing and the all in the universe is that which it loves, and this being lost it believes all to be lost. The misanthrope is regarded in society as nobody or as an abject, and this he deserves since by his hatred he is separated from all. He is to be the more esteemed, indeed, if he separates himself than if he intermingles, for when he mixes with society he injures others, but when alone only himself.

- (274.) There are misanthropes special and particular, those, namely, which hold in aversion or hatred some special race, or nation, or family, or certain persons. If this proceeds from hatred and from the causes of hatred, if from aversion and indeed a natural aversion, it is antipathy; if from what is acquired, it is from some presumed or real dissimilitude of principles and of loves; this also can be turned into antipathy, which remains in one's posterity.
- (275.) The love of solitude is commonly believed to be misanthropy because misanthropy loves to be solitary. But the love of solitude may have its origin in a great many other causes; it arises naturally from melancholy, when it is a disease sometimes curable, for then it inmostly desires to indulge its phantasies, and even extends these so far that it interests itself in particular things, in thought if not in the body. He also loves to be alone who is devoted to studies, especially those of a theoretical nature, and who chooses solitude lest the mind be disturbed, and he loves his studies and his solitude in equal measure. For that the mind may be at ease it must as it were be separated from those things which excite the animus and the sensations of the body and also the other loves of the mind. He also is accustomed to be solitary who thinks all things to be only vanity and himself alone not a vanity, or who desires to become secure from vanities and therefore separates himself from society, as certain philosophers are wont to do, the chief of whom either laugh at

all things or weep at all things. Those are solitary by zeal and not by their nature who sacrifice themselves to God lest they be drawn away by worldly enticements, like the hermits, the most illustrious of whom are those who use force and violence in controlling the desires of their animus, and thus their bodies, and do this with the intent that they may go forth the more pure and holy.

Cruelty.

(276.) Cruelty in general is the love of extirpating the human race, finding its highest delight in their anxieties, griefs, and pains. It flows from hatred and general misanthropy, and a supreme degree of self-love. For the subject of this love regards himself alone as the universe, and all those who are about him as opposing him because he cannot alone exist. This love also arises from an extreme degree of love of the world, or it may be of honours, or from an extreme love of the good things of the earth, that is, of riches, thus from envy of a general kind. It is especially opposed to pity. What the character of cruelty is appears, therefore, from the face itself, thus whether it come from the love of self, or from the love of the world, or of the good things of earth, and thus from hatred or envy toward those who possess these, seeing that he alone desires to possess them. This is the reason why cruelty is often hidden under a very honest face, but if it be exercised is likely to change into an aspect of hatred and revenge, and to end in madness.

(277.) In all revenge there is cruelty, for he who is desirous of revenge loves to have the one he hates tortured in mind and in body, and this according to the degree of his hatred; but the vengeance that arises from zeal and from a righteous displeasure loves to give pain so far as this is the means of extirpating the evil, the love toward the person remaining all the while undiminished. The cruelty is the same whether it flows from one's own

hatred or from that of another whom one loves as himself. It ascends according to the degree of the love. He who slays his enemies is not cruel, but he is cruel who ill-treats the conquered and those incapable of harm. Therefore as is the vengeance such is the cruelty; as is the hatred, such the vengeance; and as are the anger and zeal in the vengeance such is the pleasure of this vengeance.

(278.) There is a certain correspondence between venereal love and cruelty, or between the love of propagating and the love of extirpating the human race. They are contrary in themselves, but they agree in the phenomena of their effects, as those contraries often do which come together in a third term, for otherwise the circle of their relation could not exist. Each of these loves excites the organs of the sensory, the fibres, the members of generation, and produces the generative substance, as is known from natural history. Hence it appears that the affection of cruelty is as delicious to perverted minds as is the venereal love to minds that are pure, for the one does not extinguish the other but excites it. Such would be the Devil clothed in a human form.

Clemency.

(279.) Clemency is the queen and as it were the goddess of virtues. Wherefore to be clement is to be not only kingly but divine, as the king by clemency emulates the Deity. For true clemency is without hatred, without self-love, without envy, vengeance, anger, cruelty, or without any naturally unpleasant affection. It is always conjoined with love toward those to whom the clemency is exercised, thus united with tranquillity of the animus, happiness of mind, and pity. Love is always clement. From clemency the quality of the love may be known, and to whom extended. If it is the love of truth there is clemency united with justice; if the love of honour and vir-

tues, especially if it be the love of piety and veneration of the Deity, the case is the same.

(280.) But if the love be that of vices, falsities, vanities, impiety, clemency will be exercised to the disadvantage of those by whose mutual love it is affected, and this clemency is spurious and unjust. Clemency is for the most part a natural trait, like patience, for he who is clement cannot be cruel; this clemency is opposed to cruelty and from the description of cruelty the character of clemency may appear. But there is also an acquired clemency when cruelty is joined to fear but lies hidden, a snake in the grass. Clemency may be therefore both spurious and legitimate, thus a vice and a virtue.

Intemperance; Luxury.

(281.) Intemperance in general means all excess of the desires of the mind, of the lusts of the animus, of the delights and pleasures of the body, of the world and the good things of the earth. But intemperance in particular means excess in eating and drinking, as when we call it indulging one's appetite, sacrificing to Bacchus and Ares, and caring for the belly. Every love and every pleasure is for the sake of the end that we may live a healthy life in a healthy body; therefore the earth abounds in every thing enabling us to enjoy these loves and pleasures, provided it be as means and not as ends. When we regard particular loves and particular pleasures as means, then we enjoy each in a temperate way and in a manner to attain the end. But when we regard these as ends and not as means then we fall into excess, and the more ardently as we love the end.

(282.) Thus intemperance denotes a perverse state of mind, very limited and material, which in a word confines its ends to very narrow limits. But the more elevated mind perceives that one thing is for the sake of another, and that there is a chain of means to a most universal

end. Such a chain is the created universe, or the world, or terrestial society, or our very selves.

- (283.) There is nothing in our entire body which is not a means to some higher end. The last end is the soul, for the sake of which the body exists. The soul, which is the end of the loves of the body, is not the most universal end, but is an end intermediate to a more universal one, nor do we conclude with anything short of the very Deity of the universe, which is the end and the beginning of all things.
- (284.) Therefore since there is nothing which is not an intermediate end, it follows that there can be intemperance in all means which are assumed as ends. For all means in themselves are [regarded] as ends because they are distinct terms, but they are [properly] ends [intermediate] or intermediate terms. Therefore to enumerate all kinds of intemperance and describe their cause, nature, and effect, would be to review again all the affections of the mind, the animus, and the body. Any one from the description of the affections may judge of their defect and excess.
- (285.) This alone need be said, that all intemperance is contrary to nature, and what does violence to nature destroys either our mind, or our animus, or our body. Thus when these are ruled by the will, and the will by desire, and the desire by loves, not as means but as ends, we rush into so many causes of destruction, whence is the death of the body.
- (286.) But the virtues, honesty, perfection, spiritual happiness, these can never be intemperately desired and loved, for in the body we never shall be able to arrive at perfection itself, but the infinite will still remain beyond. But spiritual intemperance is to desire perfection more perfect than its own nature admits of being; thus as if the mind could become like the soul, or the soul like God, instead of being only most perfect in its own degree, and thus an image, type, and likeness of things superior.
 - (287.) The inferior form can never be elevated to the

perfection of the superior form, unless by previous dissolution and its own death. Therefore we subsist still within the limits of temperance as long as we desire a more perfect state, however immoderately it may appear; thus so long as the mind desires intelligence and wisdom. Intemperance, therefore, is always a vice and not a virtue.

Temperance; Parsimony; Frugality.

(288.) We learn what temperance is from the description of intemperance, that, namely, it is a moderate use of the delights and pleasures of the body in order that these may be corresponding and proportionate means to ends. Thus intemperance properly signifies excess, but it involves also a defect, for a defect in one regard does not exist without an excess in some other, as a defect in nourishing the body indicates an excessive economy; and there is besides an excess of avarice or of abstinence which is equally injurious to the body. Therefore a moderation in all things is itself temperance, but it is known by other names when reference is had to other objects; as temperance denotes moderation in eating and drinking, parsimony, moderation in spending wealth and the goods of the earth, while frugality has regard to domestic economy. So in other things. Meanwhile, inasmuch as temperance is a natural mediocrity, it is qualified according to the nature of any one, wherefore the temperance of one is sometimes the intemperance of another, and so Therefore the measure and the scales of all the affections of the mind as well as of the animus and of the body, of which we have thus far treated, is temperance which is the preserver of all in order that there may be a sound mind in a sound body.

In a word, explore that you may understand what is true and what is good, and regard all things as mediate ends, by which you may arrive at the ultimate end in continually inquiring, For what end?

XV.

CONCERNING THE ANIMUS AND THE RATIONAL MIND [MENS].

(289.) There is nothing more difficult in the science of rational psychology than clearly to understand, and when understood clearly to set forth, what is properly the animus and what is properly the mind [mens]; for the several things which are put into action in our inner sensories appear like a little chaos whose surface even we cannot distinctly see, still less its parts, one of which adheres to another as in a chain; it may be in some measure compared with the animalcule, which we can hardly reach with the aid of the microscope, from whose motion alone we understand that it is something living, nor do we doubt but that its little viscera are distinctly produced and separate and that it enjoys a brain, medulla spinalis. lungs, stomach, intestines, muscles, and sensory organs, since the eye has detected this in similar animalcules by the aid of the optic art. But where the sight hardly touches the surface it is very difficult to divine the interior and more hidden things; and such is the case with our inner sensory. We are able by reflection to discover that we perceive, understand, think, choose, desire, will, are determined to act, and that these are companies of loves, cupidities, desires, pleasures, ends; since these are all of our sensory, and appear as though continuous and united, it is only with the greatest difficulty that they can be separately evolved, and that the ideas of our own intellect may be distinctly presented to the intellect of another. For who can see in the dark the art of the

painter or the beauty of the figure? and who will properly perceive it even if the painter in the dark explains the figures by his words? Therefore we must await the rising of the sun and of light, in order that all things may be laid open as it were to the life.

(200.) And this is the reason why we are ignorant as to what the mind is and what the animus. It was believed by the ancients who were not philosophers, that the animus was the same as our soul, wherefore also they said that the animus is immortal; but the philosophers distinguished between the animus and the mind [mens], and they acknowledged a certain superior animus which they called the mind [mens]. Some even make mention of a certain superior and purer mind* [mens] also in us; but in order to discover what the one and what the other is. what is their distinction and what their conjunction, we ought ourselves by some untiring reflection and intellectual observation go into the several operations, and indeed in their order, one after the other, and then after having performed this labour, we ought often to go over the parts again, and so examine by what chain they are held together. For our mind is not constituted differently from the internal form itself of the body, which enables us to know what it is only through operations, only by our anatomically laying bare one part after another and exploring and inspecting it within. Such an anatomy of the mind is also required: thus we are to be taught what we are from ourselves, and the mind is to be investigated by the mind; for so scientifically does it act from itself that all the philosophical sciences have gathered hardly more than the least part of a knowledge of it. But let us pass on and inquire, What is the animus, and what is the mind?

(291.) That the animus is not the soul, and is not the same as the rational mind, is most evident from the fact

^{*} See Appendix II. [Tr.

that all those affections and cupidities which are purely animal are ascribed to it, as anger, venereal love, envy, and others, which are not peculiar to the human race, but belong as well to the brute animals. The animus is never called rational, like the mind; all the cupidities of the animus die with us; for after death anger, lust, haughtiness, pride, fear, revenge, and other similar affections do not remain, and without these the animus could not live, because it is of these that it consists. Thus the animus is purely animal, and as it were an inferior or irrational mind; for while the animus is affected and desires, it is not that which thinks, since it is beneath that animus, so to speak, which thinks and is called rational. Wherefore the cupidities of our animus are to be restrained by a certain higher or rational mind, and to be moderated according to the decision of the judgment of the mind. Moreover, the soul and its every affection is inscribed on the countenance itself, on the tone, the voice, the action, that is to say, on the body; and at the same time the animus has been inscribed on every thing flowing in; wherefore the animus is so close to the body that it is in it, and shows itself corporeally, as in anger, revenge, haughtiness, hatred, love, and the rest. Moreover, what we think does not shine forth from the face unless the thought be conjoined with the affection of the animus, except a slight twinkling in the eves if they are unable to simulate; from which it clearly appears that the rational mind is most distinct from the animus, but nevertheless so conjoined with it that we may call our rational mind the superior animus, and the animus the lower mind: but let us take care lest we confound the ideas through similitude of words.

(292.) But it is asked, What is the animus? If we call the animus the inferior mind, still by this denomination we do not understand what the animus is so long as what the mind is is unknown to us. Therefore we are not thus helped to know what the animus is. If we define the animus as the beginning of the mutations of our body, we ac-

knowledge indeed that there is a beginning, for nothing ought to flow forth except from its beginning; but what the animus is is still unknown, for there are infinite beginnings of mutations; and each would have to be explained as to what it is in order that we might affirm or deny that the animus is such a beginning.

- (203.) If the animus is described as being the form of the material ideas of our common sensory, it will be necessary to explain what form is, what material ideas are, and how their forms are to be conceived of, and lastly what this common sensory is to which is ascribed the form of ideas. If the animus is called the universal affection of the sensory, or if we say that the affections taken together constitute the animus, nevertheless the question arises, What is it; where is it; of what kind is it? For the animus is still to be affected, and not the universal affection. So whichever way we turn, our search still ends in some hidden quality. Thence it results that the animus is believed to be in some crypt of the brain, like the regulus of the eye; or that it is a quality which is without a subject, and that the quality may be some such principle or beginning as that of the mutations of the body.
- (294.) But in order that we may understand what the animus is, we must at least approach its source; for it is not to be doubted that the brain receives all the senses of the external organs, such as touch, taste, smell, hearing, and sight; for from these several organs the nerves go out, which rush to and enter the medulla oblongata and the brain itself; and that the brain receives the inflowing senses is shown by infinite other phenomena, since when the brain is obstructed, or a nerve entering the brain is obstructed, all sensation perishes at once. Therefore by common consent the brain is called the common sensory.
- (295.) This also is an admitted truth [constans veritas], that every nerve is divided into fibres and fibrils, and that each fibre has its own origin. If we follow the fibre to its origin we see manifestly that it terminates in a certain lit-

tle head or small globule which is called the cortical gland: this can even be seen by the aid of the microscope. Therefore since the sensations which run to the brain cannot subsist midway, but must by all means strive onward to their origins or beginnings, there ought to be in these beginnings that which feels and receives the sense. These beginnings are as many as there are fibres; for such is their abundance and luxuriance that they constitute the whole covering of the mass of the brain and also occupy its interior. It follows that these glandules taken together are that which is called the common sensory. If we examine this cortex or this substance we perceive that all its parts or all its glandules are together disposed into a certain form which is most perfect, and which we call the spiral; and also that these glandules are distinguished from one another, co-ordinated and subordinated; in a word, that these glandules, which are so many little sensories, constitute the form of the particu-This much being premised we may see what the animus is. This cortical brain or common sensory receives, as it is said, all the external sensations, but it also perceives all the single differences which are impressed on the fibres and nipples of the organs. This sensation cannot be called the animus. This is the bare perception of sensations, or of the modes with their differences and discriminations. It is therefore the common sensory which feels and perceives, but not the animus. But still every simple or compound sensation is a certain form, consisting it may be of the discriminations of the slightest touches and forces; such is the sensation of taste, such the smell, such the hearing whose forms are distinctly perceived both in song and in the single word which is thence called the articulated sound; such is the sensation of sight, for every object or every image is formed from the differences of light and shade, especially the composed image or the object in its totality. This form, while it appeals to the common sensory or cortical

brain, is not perceived simply as sensation, that is, as being sweet, bitter, pleasant, beautiful, harmonious or inharmonious, but it also exhilarates and gladdens the brain, or saddens the animus, exactly according to the quality, the perfection and imperfection of its form. This is called the brain's animus which is said to be affected; thus the animus is not separated from the common sensory; and so far as it is the sensory which is affected this itself is, as regards the affection, the animus; so the perception is a distinct thing from the affection; and yet both are of the brain.

(296.) Thus it is the common sensory which is affected pleasantly or unpleasantly, delightfully or undelightfully; whence the sense, and thus the joy, the sadness, or any other passion which is ascribed to the animus alone. Properly it is the joy or the sadness itself which flows forth from that grace or that harmony or disharmony of modes in those things which are felt and perceived, which is called the external affection of the animus; but there is also an internal affection. The animus is also the principle or source of all the changes of its body; for the affection itself of the sensory or of the single cortical substance is transfused into the containing fibres, and by those into the whole body which is formed only of fibres; thus passion is ascribed to the mind, that is, affection; as also action, that is, the beginning or source of actions.

(297.) But because the mind of one is not similar to the mind of another, but what affects one pleasantly affects another unpleasantly, and by the same harmony of sound or form of vision one is made happy, another made sad, it follows that the state of one sensory is different from that of another; for the affection is according to the state of the sensory. For the same operation upon two dissimilar subjects varies according to the state of the recipient or of him who is affected; and because the animus is rejoiced, saddened, desires, is made angry, undertakes to do, and thus has life in it, it must be that in the common sensory and in the particular little sensories there is

that which lives; hence we must inquire whence derives the animus thus its essence and its life.

(298.) That we may still better understand what the animus is let us speak by examples. What in the taste is saporiferous, this is perceived in the common sensory as something sweet, something bitter, or acid; but this perception does not go farther, and even the pleasure also is in the same sense as though in a certain common taste; but still an appetite is thence excited, and indeed for those things which agree with the state of the body; as in those brutes which from taste alone seek for those things agreeing with their nature; and this faculty of the appetite is what belongs to the animus.

Similarly in the sense of smell. In the sounds of hearing [this appears] still more evidently; the modulations of the song and the particular differences of the sounds are perceived by the common sensory, likewise also harmony itself, and grace, of which there is as it were a common sensation; but the hilarity and joy, and the affections thence arising of every love, is something belonging to the animus. Likewise in the objects of sight, the smiling grassplots of the garden, with the particular flowers, roses, and orchards, are perceived by the eye and the common sensory, also the beauty resulting from the orderly arrangement of the plants: but the inmost delights thence arising, love from the view of the beautiful: and revenge, fear, anger, from the sight of an enemy; pity at the sight of the miserable,—these are of the animus, which is carried away into various affections thence arising, and from these into desires which are communicated to the body.

From these things we see how difficult it is to perceive distinctly what the animus is, and what perception, for there is as it were a distinct nature to each; the differences of perception are as many as appear in the sensations, which are innumerable. But the kinds of animus [animi] are as many as are the affections, each of which

carries its own special and particular differences. From the comparison itself it may be understood that there is in the animus a certain life which is communicated to the perception of sensation or the sensory, without which there would be no sensations; thus the animus is the life of the sensations.

(299.) But the animus lives not from itself but from the very soul, which alone lives, and by which all remaining things in the body live. The animus, however, cannot live in the same manner as the soul, for it is far removed therefrom, and it is a more imperfect and composed form, which is that of the common sensory from whose form the animus derives its being called a form; therefore we must now inquire, What is that mind which is the form of forms, and may be called the higher animus?

(300.) It is equally difficult to understand what the mind is, although nothing is more familiar in common talk, and that this word is always appropriately inserted in conversation is an indication that our rational mind knows exactly what it is, but that we are ourselves ignorant.* We ought, however, to inquire regarding it as we would ask of an anatomist, what is in the heart and arteries, when he knows from the pulse that there is something from which the pulsation comes. If it is not defined by the "form of forms" it would be better to say that "the mind is the mind," or that there is something which may be expressed by form, by which we mean a quality more hidden than the mind. But if we say that the mind is the principle of all the mutations of the animus, we must explain Principle, what it is, where it is, of what nature; for principle is a general word like force and cause, which may be said to be in any thing. If the mind is said to be the source of the rational affections, resulting from the harmonies of intellectual or

^{*} The author is understood to mean here that our instinctive knowledge of the mind enables us to use the term correctly, while we remain intellectually ignorant of what, in all its particulars, the term implies. [Tr.

immaterial ideas, as the animus results from ideas not immaterial, something appears to be expressed, by which we approach more nearly to a knowledge of the mind; but that it may be perceived the source itself must be inquired into, [tracing it] from its streams and the streams from those things thence derived which either present themselves before the senses as effects, or have some analogy with sensible things.

(301.) To explore, therefore, what the mind or the superior animus is, we must proceed in the same way as above in the exploration concerning the animus, that organic substance itself; or we must seek out that internal sensory where the mind as it were resides. For that the mind is in the brain is beyond the possibility of a doubt; the state of the mind is the state of the brain: they are so far united that whenever the one is injured, languishes. and seems about to die, the other is equally so. It is to be borne in mind that the senses of the external organs through the containing fibres flash even to their beginnings or to the cortical glandules, and that in these surely ought to reside that principle which is in the senses. This glandule has been frequently shown above to be the brain in its least effigy, and there is in it a medullary and cortical substance similar and analogous to that which is seen in the common brain; some such little body therefore we have called the internal sensory, and we have observed that these little sensories taken together constitute the common sensory; if accordingly there is a similar analogous cortical substance in each such little sensory, it follows that that substance taken together is the particular or internal sensory itself, and that its each least cortical part is an intellectory in which, we will suppose, is the pure intellect, concerning which hereafter.

From this idea, by mere comparison and analogy, it may be understood what and of what kind is the superior animus or the mind; but let us institute the comparative analogy itself.

Especially may the sensations of sight be compared with the ideas of imagination or of thought; for they mutually correspond, and by cultivation the images pass over into similar ideas; thus in the place of the images of the sight are substituted intellectual ideas, and with these we may proceed in the same manner as with the sensations above for which we investigated the origin of the animus: so we shall find the mind itself.

(302.) On the internal sensory itself are impressed as many ideas (as it were immaterial images, if we may use so crude a term) as there are images of the memory and the imagination, which are formed and drawn out by the changes of the state of the sensory; these immaterial or rational ideas are perceived in the pure intellect or in that most simple or simple cortex, in the same way as the images of the sight are perceived in the common or external sensory; consequently the ideas themselves are like so many internal sensations with their differences: the ideas thus understood constitute the mind, but only its intellect or its thought. That good and loveable affection which results from the harmony of these ideas or from the thought is that which is said to flow from the mind; consequently that which is affected is the mind, and the mind is that life itself which is in the animus, therefore the principle or beginning of its mutations.

(303.) But still we are ignorant as to what the mind is; for when it is said to be life and a principle, it is rationally conceived as being a certain quality flowing from the form of its intellectory when affected; and thus as nothing [nulla] without its organic substance. But we may not stop here; let us go farther. This intellectory or purest cortical substance of the internal sensory can by no means exist and subsist of itself. This ought to consist of substances still more simple, that is, from the most simple of its realm. These most simple substances are what we call the soul [anima], in which there is life, and which is the mind itself of its intellectory, and conse-

quently the life of the mind itself, which nevertheless lies so internally hidden or dwells so deeply within that it is distant from the animus by several degrees of perfection. From the description of the soul we uncerstand this mind itself, what it is, what its quality is, or what its form, and what its principle is.

(304.) There are therefore a superior mind and an inferior mind (or mind properly so called), which reign in the animated body and which mutually communicate their operations. The mind itself properly so called is spiritual; but the animus is purely natural, and may be called corporeal so far as it is immediately affected by the harmonies of the senses of the body and flows immediately into the features of the body and into the forms of the actions; this therefore is the reason why some of the ancients called the animus immortal, understanding by this the mind, as may be seen from the proper interpretation of their language.

(305.) In order, therefore, that the mind properly so called may communicate with the animus and by the animus with the body, there intervenes a certain mind called the rational, which is our proper mind, which is affected, desires, wishes, and at length determines its desires into acts. Very many have believed that this rational mind is that superior, and indeed supreme, mind which lives in us, and this latter they seem to confound with thought. But that the case is otherwise plainly appears from those particulars of which we have already treated, and from others which are to follow. For the rational mind itself is not able to derive its essence and its life from itself. but through culture, knowledges, and arts; and in the course of time it becomes such that it can possess more in itself than all the sciences in the universe can ever These things it does not derive from that culture and experience, nor can it derive them from itself; there must be certainly a superior mind which flows in, which is pure and spiritual, and possesses in itself all that nature which we ourselves admire as the superior in

that mind, and from which we draw forth only a few drops that we may conceive and put forth our theoretical and psychological sciences.

(306.) But this mind which is called the rational is not properly the mind, for it is intermediate between the mind and the animus and participates of both, and thus is born of both. For a spiritual mind flows into it from above, and a natural mind or the animus from below, which is the reason why it is called rational; for that it may be rational it ought to participate in both the natural and the spiritual. Thus the more it communicates with the spiritual mind the more eminently rational or the more and more spiritual this mind becomes; but the more it derives from the animus or natural mind the less rational or more corporeal it is. Accordingly the superior mind and the animus meet, and, conjoined in the internal sensory, they put forth their common progeny.

This also appears from the various affections; for while the rational mind is excited by the animus, as by anger, revenge, illicit love, and other affections, it does not immediately come down to take part, but it is withheld by a certain higher and purer mind; and so it is [reluctantly] led away by the animus into either commanding those things which are opposed to it or favouring them with its assent. This deliberation and pondering could never exist unless the rational mind were constituted in the midst between two loves which sometimes oppose. It is therefore like the beam of the scales turning whichever way the greater weight draws it. To this mind may be ascribed intellect, that is, thought, also judgment, choice, and will; but intellect cannot otherwise be ascribed to the mind than perception of sensations to the animus: it may be that that mind is the life itself of the intellect, or that thought could not exist and subsist without its mind, that is, without its loves and desires which not only excite but vivify its intellect. The mind is therefore the life of the thoughts, as the animus is the life of the sensations.

XVI.

CONCERNING THE FORMATION AND THE AFFECTIONS OF THE RATIONAL MIND.

(307.) We have treated of the affections of the animus; and before treating of the affections of the rational mind which is as it were midway and like a centre of influx, we ought to treat of the affections or loves of the pure or superior mind. But to treat at once of the loves of the supreme mind would be to fly from the lowest to the highest, and from sensible things to those which do not come under our intellectual comprehension and which do not admit of being described by adequate terms; but those things which are met with in the rational mind fall under the comprehension of the intellect because they are ours; these also would by no means come under the comprehension of our intellect unless there were a purer intellect or a sublimer mind which flowed in, and from which we were able to view those things which are in the rational mind as if beneath.

(308.) But since it has been said above that the rational mind is intermediate between the pure mind or that of the soul and the impure inferior mind or that of the body, that is, the animus, it seems to follow that the rational mind possesses no affection proper to itself or of itself; for it is the centre of influxes or that in which are concentrated two essences; it cannot be said to be other than the common essence of the two, or one nature composed of both; this is also most true; but this composition or mixture is an essence by itself whose nature differs from both according to the mixture; but whether and in

what sense it can be called an essence proper—this remains to be seen hereafter. Some preliminary consideration is, however, necessary here.

(300.) This is sufficiently clear from experience and from reflection, that our rational mind desires or is possessed of desires. Desires cannot exist without affections or loves: for what we desire this we love, and what we love we desire according to the degree of the love. These desires in the rational mind are called cupidities in the animus, which cannot be given without bodily affections or loves. This also is clear, that we are able to choose that which is best and to reject the bad, or that our rational mind is able to judge freely and to act in accordance with its judgments. If the loves themselves did not belong to the rational mind, but only flowed in from elsewhere and forced this mind to judging and to acting, then nothing of its own and therefore nothing free could be predicated of the mind. But this free choice itself demonstrates that the rational mind is intermediate between the loves which flow in, and is the umpire in the election of the best. This also is clear, that there would be no will unless there belonged to the mind some affections, one of which it might will rather than another, but there would be either cupidity or instinct in the place of will, as in brute animals. For all that is cupidity which is from the animus, and all that is instinct which flows down from the superior mind.

(310.) These things clearly indicate that those loves which are insinuated into the rational mind are so united that they are distinct as to essence and nature from the loves of the superior mind and from those of the animus, and thus that they constitute a certain proper, as it were, separate mind, but still such an one that as it exists from both so it subsists through both, and depends upon both, not indeed equally but just as it bends and inclines itself more to the one than to the other. To the aforesaid arguments this also may be added, that we never could be

blamed for any fault or crime if their were no love existing in the mind as proper to it or as most emphatically our own. For we acknowledge nothing as our own and properly pertaining to us except what exists in our rational mind, for that mind is the most verily mine [ipsissimum meum]; other things are mine as far as that mind calls them its own; nor does it consider them otherwise than as its own instruments, by which it is able to be what it is and to do as it wills; which is also the reason why we say that any one is what he is according to the state of his mind; the weak and dull and impotent of mind we hardly call a man; but the most intelligent and wise we call the true man and divine; thus the proprium of all that is in him is of the mind.

(311.) But if we regard the matter more deeply and attempt to explore what is proper to the rational mind and what is not (for what pertains to the mind and is in it this is said to be proper to it, but still it is not therefore truly proper as sight is to the eye, which is truly proper to the internal sensory, since this sees without the eves while the eve does not see without the internal sensory), strictly speaking, I see nothing as proper to this whole internal sensory or human intellectory except that its mind may bend or turn itself to the superior mind, or that of the soul, and admit its loves that they may flow in, or receive them, in what manner shall be told elsewhere; or else to the lower mind or that of the body, that is, of the animus, and permit its loves to flow in, or receive them; all other things whatever are not proper [to this intellectory] except as by flowing in in this way. For the rational mind is as the standard which holds the balance; in the human body there is nothing except soul and body, or nothing except the spiritual and the natural; the other things which are intermediate participate of both, and so far as they participate they, like the scales, depend upon both. That therefore each may be held in equilibrium the rational mind is provided

to be the moderator and governor, and thus in this point solely active, but in others passive. It is commonly received as a truth, because common experience teaches it to every one, that so far as our rational mind admits loves which flow in from the body and its blood, or from the world through the gates of the senses, and applies itself to these, giving and surrendering itself to them, so far it is removed from the loves of the superior mind or from spiritual loves; and so far as it removes itself from the loves of the body and the blandishments of the world, so far it admits the loves of the superior or spiritual mind; the spiritual is as it were suffocated by the natural, and the natural is exterminated by the spiritual. Thus it appears that there is an internal man which fights with a certain external man, and the mind itself perceives the battle, and either gives up, conquered, or else carries off the victory.

- (313.) Since, therefore, the loves of the superior mind and the loves of the animus, of themselves and freely, flow into and flow together in the rational mind, and since it is the property of this latter only to bend itself in one direction or the other, we see how that the other things which are in the rational or the properly human mind flow thence; so that it may be said of them that they are proper to it; for whatever things flow from that which is proper or from the will as necessarily constitutive, these are also proper and derive their name and power from their source. But let us proceed in order, and by means of examples.
- (i.) The first love, will, and as it were desire, of the pure mind or soul is that of associating to itself a lower mind or animus, which it produces or creates from its own essence and into which it inspires life; that is, the soul forms, and indeed out of its own essences, the pure intellectory, whose mind is natural; this mind is in the pure intellectory and in each one most particularly; the common essence and life of these particulars is called the animus, in which, therefore, there is only the natural and

the bodily but not the spiritual, although it descends from the spiritual and is created from it. But this love is not yet that of the rational mind, but that of the pure or spiritual mind.

- (ii.) The spiritual mind, already associated with the natural mind, now loves and desires nothing except what is common to both. The spiritual mind loves its own natural mind, and the natural mind respects and venerates its own spiritual mind, and yearns with the highest delights that it may depend upon this and may be subject Hence now flows the first love, it may be to form the organs and instruments by which it may so act and operate; as love and desire give and take commonly to and from each, these organs are formed most conveniently for the nature and the love of each; for either mind regards those ends only, and because these cannot be attained except by organs and instrumental means, hence these instrumental means are formed with a view to every end common to both; thence arises that corporeal machine which is merely organic, exactly according to the image of the operation of either mind. But neither is this yet the love of the rational mind.
- (iii.) This delicate body being formed and put forth from the maternal egg or womb, at once there succeeds or is born, as it were, or unfolded from the former, another love, which is the love that it may become a man or that it may be furnished with a certain proper mind which may be called rational; for man derives his quality of manhood from his rational mind, since such as that mind is, such is the man. Then the pure mind or soul does its part, and the mind of the pure intellectory does its own, that is, the spiritual mind and the natural mind, and because each pursues a common cause and desires to pour into this mind its essence, nature, and life, it follows that this mind is called rational; for the rational signifies the spiritual and the natural together or mutually participating.

- (iv.) He who loves an end loves also the means conducing to that end. Each mind provides the means by which it may arrive at its end where it constructs its organs. Therefore common to both is the first mediate love or love of the means, which is that the organs may perceive, as for instance that the ear may hear and the eye see, or the common sensory or the brain perceive those things which are heard and seen. For this is the first way or first means of forming the rational mind and informing it. Whatever there is harmonious this is pleasing, this gladdens the animus; and whatever is inharmonious is unpleasant and grieves the animus. So the animus is now first excited, and so concurs as if of itself in producing this rational mind. Still the rational mind is not as yet, any more than in its cradle or in its first infancy, for it only begins to be in that it is able to bend and turn its sensorial organs and to imbibe objects as they flow in. This is the one thing, as said above, that is proper to it, and to which it is incited by the mind, which is affected pleasantly, joyously, and delightfully by harmonies. Now its golden age begins, innocent smiling, because the animus has not yet risen up against the mind, but loves it inmostly; for the mind is in the animus itself, and both conspire to one end, and the animus is thus far ignorant of what the world outside is.
- (v.) This common love progresses always farther and grows in progressing; already material ideas are insinuated in the common sensory, and in the internal sensory immaterial ideas or first principles of the intellect, not from any proper love of the rational mind but from the love common to both the animus and the spiritual mind; for the rational mind itself is thus far ignorant whence such love comes, as it flows in as much from the mind as from the animus. The mind desires the end, the animus the effect, and it is ignorant of the end of the soul, but it is excited by the pleasure which flows from the harmony of the internal and external sensations. The rational mind itself does not as

yet contribute anything more from itself than that it applies itself, turns and attends to what flows in from both sources; for when it attends, its attention only is required.

- (vi.) The ideas of the memory and the imagination being thus increased, man begins to understand or to perceive something beyond, or to draw some essence or higher sense from words, which are all material ideas. When the intellect begins to form it also thinks. And thus there is further progress and at once from the things of thought into the will, not indeed from any intellect but from the love of a certain pleasure which is insinuated by the senses into the animus and by the animus into this intellect.
- (vii.) These delights of the animus which are communicated to the rational mind appear as though they were in the mind and were felt therein; but they are outside of this mind itself, for whatever appears delightful, pleasureable, and joyous to the animus, appears and is called good in the rational mind, but contrary things evil; the goods and evils themselves are all those objects of love, or those things by which the animus is affected. Then the rational mind, curious to know whether this be good or evil which appears pleasant and loveable, is therefore carried on by a kind of desire to wishing to find out whether it be a true good or a false good, that is, an evil, as also whether it be a real evil or an apparent evil. For the knowledge of the true signifies nothing in itself without the good, since what is true ought to regard the good as its subject. The rational mind does not stand still here, for it cannot be persuaded whether a thing be truly good unless it finds out the subject of the good, for there is no good without its subject. This subject at first appears, but to know whether it be truly good it is necessary to inquire as to the quality of this subject, what are its attributes, accidents, and adjuncts; and at length, these being explored, it may be persuaded whether this good be truly

good or not. Thus the rational mind proceeds in particulars that it may explore the nature of things placed before it by which it seems to be affected. Such appears to be the intellect of the rational mind, the which if we inwardly examine we shall clearly perceive that all these [affections] are not proper to the intellect, but that there flows in from above some love of knowing the quality of all those things which flow in from beneath by way of the senses and the animus; so that that superior mind may call our rational mind into its service in order to inform itself of the things obvious to the senses, lest by chance it be deceived by appearance; for the superior mind knows best how innumerable are the fallacies of things. This is the reason why we are naturally carried away by a certain desire of knowing not only the present but also future things, and not only what is apparent but also what is hidden. For this curiosity is called inborn. and it is the first mover in the perfecting of our intellect, or it is itself the love of communicating its knowledge to that mind which is to be instructed. In these things that mind does no other action from itself except to turn its rational view to the higher mind or to the soul. Other things spontaneously flow in, the very love exciting the desire of knowing; but from that moment in which the mind applies itself all this intellect is predicated of the mind as belonging to it. Indeed the faculty not only of perceiving but of thinking and judging becomes as it were its own, because it is now acquired; but while it is being acquired the mind itself is as though passive, only turning itself to this or that side.

(viii.) In the formation of the human intellect there occur four ages, hardly otherwise than in the great world or the macrocosm; the first or golden age is when the animus is entirely subject to its mind, for then it cannot be called the animus but the lower or natural mind; the next or silver age is when the animus is not subject to the mind but reigns with that in equal right. The third

or brazen age is when the animus begins to fight with its mind and endeavours to cast this down from her throne and make it her handmaid. These things are perceived in our rational mind from those very loves which rule and command; if they are of the body and of the animus, or of the world, it is a proof that the spiritual loves are driven from their thrones and extinguished; but when the spiritual loves reign the bodily loves yield and as it were become cold, and the lusts of the body are said to be dead. For so far as the things of the body live those of the spirit vanish away, and vice versa.

- (ix.) But a state of integrity would be that wherein the spiritual loves alone reign; then there would not be any rational mind, but the spiritual mind alone, for there would be no confluence of loves. Consequently in order to be corporeal we can not easily subsist in that state; it would be superhuman and miraculous. But still it is our better life when superior and inferior loves reign equally, and the rational mind is elevated above its body, and is so instructed from itself concerning outward things that it has need of no science as a teacher. We are always inclining to lower things; thus we are drawn away from this equilibrium, that is, this rationality itself. Infants are only spiritual, but in them the rational mind is [as yet as] nothing, or if it is anything it is not rational but spiritual.
- (314.) But let us return to the affections or the loves, and inquire whether there are any in the rational mind which may be properly called its own. But we cannot make this inquiry without first examining all those desires which appear to be in this mind; from these then we shall be able to form a conclusion.

The Loves and Affections of the Mind in general.

(315.) In our rational mind loves perpetually reign, nor would there be any mind without loves, as there would

be no animus without affections. For the loves are of the mind as affections are of the animus. Those very objects with which the mind is affected are called its loves. The rational mind also possesses intellect, and the intellect is something separate from mind, just as sensation or perception is separate from the animus; but still there can be no intellect without mind, that is, without objects which are loved, or without loves. If only we observe the state of our mind, this appears clearly, that some love is excited by the first apperception or intellection. This love first excited is the first, the last, the middle, the all in the thought; without the love the thought could never exist. This also is known from the desires, from the will, from ends of the mind: unless there were love there would be no desire, for we desire what we love. The love itself is in the will, which would become torpid or as nothing without love. The end itself is that subject or that object of love; therefore the love is the first, the middle and the last in our rational mind. But the loves are innumerable. and the very means of the ends are loves because they are regarded as united with ends or as continued into them.

- (316.) The mind is therefore the soul itself or the life itself of the intellect. The intellect may be compared with the body of that soul. Such is their conjunction that if the mind or its loves recede the intellect is nothing, or like a lifeless body. And the love without the intellect can be described as a soul without a body. Therefore a certain love is in our rational mind before the intellect, and the intellect is formed from the mind as a body from its soul, in which it is first and last, or the whole.
- (317.) But it is asked whether these loves which are understood to be in the rational mind are its own, or whether they come from elsewhere. They appear indeed as if they were its own; but lest we should be carried away by the appearance only we ought to examine some of these loves, and afterwards the other affections which appear to be in the mind.

The love of Understanding and of being Wise.

(318.) In the earliest infancy there does not appear to be any love of being wise in our rational mind; the reason is that we are still unconscious of that love, or [of knowing] by reflection upon phenomena what may be in them as a principle; then, too, because it is a certain universal love not vet limited or determined to the love of a particular knowledge; that nevertheless this love is there we may conclude as certain from the very effect of it, for without such a love we should never be able to inform our mind or furnish it with any intellect, which nevertheless is perpetual from a certain active principle or love. What we desire to see, to hear, to retain in memory, to imagine, to think, this in our innocent state comes from an implanted love of understanding and being wise; those delights which are also in the senses themselves could not be delights without this universal internal principle. But in this period of life the love of understanding is quite general and undetermined, and so is the pure love of being wise without any object in which there is something loveable, on account of which especially we desire intelligence. But in adult age we direct this universal love to a single kind of knowledge which we love more than others, as to the art of war, nautical science, politics, mathematics, science of civil law, theology, and so forth. As age still advances we direct this love to some species or part of a more universal science. In this state we love only the knowledges which go to perfect this chosen one. and these so far as they have an affinity with it. Hence it appears that there is some love in our mind which is to become rational, and this from itself or naturally, which is first a universal love of all, then in the course of time, a particular love. For if there were not in infancy itself the universal love, we would be entirely unable to furnish the mind with any intellect unless there were a special determination to some particular knowledge. This may be

compared with the appetite for eating. Before taste and relish there is in the embryo and infants the love of eating, nor is it affected with any taste until time has elapsed; wherefore it is nourished with milk which is almost tasteless; but in the course of time the appetite is awakened through the delights of taste. This love cannot be said to be properly of the rational mind, because it is in us before the formation of the intellect, and, the intellect being formed, it is not known to be in that except by reflecting on its effects. Therefore it is infused from the superior mind and nourished by delights of the animus, and so excited [into consciousness].

The love of Knowing Hidden Things, and Admiration.

(319.) That there is an inborn love of being wise we perceive from the love familiar to every one, that of knowing hidden things; for this love it is which forms our whole intellect. For every thing which has been impressed on the memory of the infant and child were before that time hidden; as soon as they are impressed [the child] is seized with the desire of knowing what still lies hidden in that which is known, that is, its qualities and many other things. This love carries us into those sciences by which we are persuaded we shall arrive at the knowledge of what is hidden; the whole learned world is carried away into physical experiments in order that from these we may know or penetrate into the hidden things of nature. The ancient philosophers were all seized with this love, but with them it was the love of penetrating into the hidden things of nature a priori, or by principles and a rational philosophy; but those of our day wish to penetrate a posteriori, or from experiment; they both have the same love, for they concur in this end.

Who does not desire to behold nature in her inmosts and unveiled? Who does not desire to know what the

soul is, where it resides, what it will be after death, what is the highest good? Who would not like to know the interior things of another's mind, the secrets of his companions, of society, of kingdoms; who is not delighted when he contemplates with the telescope the moon, a planet and its satellites, while he wishes he might know whether there are inhabitants there, and how in this great vortex they pursue their daily and annual motions? Who does not love with the microscope to detect the least things in nature, and the insects invisible to the eye, besides infinite other things; all of which indicates that there is implanted in the human mind such a love, which also is the principle of becoming wise and the efficient cause of the formation of our intellect. And because it is in us before this formation [of the intellect], nor do we perceive that it is there except by judging from its effects, it follows that it flows in from a certain higher mind in us to which it pertains universally to know and understand all things, and to wish to communicate this its own to some lower mind, by which it may make itself present to the body.

(320.) Admiration is the affection of every perfection relatively to its subject. For we wonder at wisdom in a boy but not in an old man, at intellect in an insane person, at something analogous to bravery in the brute animal. So long therefore as we have no knowledge or only a slight knowledge of an object, then we wonder at its perfection however slight; thus we wonder at the wonderful things in nature, which are infinite, at its hidden forms, and the like. Wherefore children wonder at all things because to them they are hidden. Wherefore this wonder coincides with the love of knowing hidden things: for what we wonder at is deeply imprinted on our memory. We wonder that nature is so admirable in her kingdoms: but if we knew what she herself is, and that she is most perfect, and able only to produce such things as these, we would then cease to wonder.

We wonder at the miracles of God and the proofs of His providence, because we do not comprehend that He is infinite and His perfection infinite; if we should perceive this we would be amazed at nothing, but only venerate and adore, in thinking that what we comprehend in mind are the least things and that there are infinite things which surpass the intellect. But He is the most hidden and the never-explorable to any mind, in order that He may be God, whom from the universe and from the wonderful things of nature we may admire and adore. What would God be if He were not inscrutable?

The love of Foreknowing the Future.

(321.) The love of foreknowing the future concurs, in the third place, with the love of knowing hidden things; for we love to know the future because it is hidden, and because we love we desire it; and the difference is only between the things simultaneously hidden and those successively hidden; for what are now present are to be successively brought about. Therefore when we know these things we conceive of them as present and now existing, for all past things were once future; therefore also this love declares that there is something implanted in our mind which is the active principle in the forming of our intellect. This love also so reigns in every human mind that it is present in its every desire of ends; for when we desire any end and some impossibilities stand in the way, we desire at once to know the final event, whence comes hope; wherefore in every one in whom there is hope there is the love of the future which we desire to know. As the result of this love of human minds, many arts have been thought out, as physiognomy, geomancy, Pythagorean arithmetic, judiciary astrology; in former times auspices, the consultations of oracles, divinations, interpretations of dreams, and many other similar things. Even the innumerable events of the past, as the fates and

histories of kings and empires, do not so delight the mind as does that one new thing which we desire to know. Such as the love of self is so is the love of knowing one's own happy destinies, which even to children is most pleasurable; as the love of country is great, so great is the delight of knowing of its future posperity. This love seems to be in the mind, but still not proper to the mind, for the same reason given above regarding the love of knowing hidden things; for one and the same love is the sign that there is such a knowledge in the soul, and that from this knowledge come the presages of mind and the turning out of dreams.

The love of Truths and Principles.

(322.) The intellect of our rational mind could not be informed and become intellect without the love of truths. for it needs to have as many truths as ideas. From these, analytically examined and compared, new truth arises, and from this and others similar still further new truths. until at length we arrive at those universal truths which belong to the soul and the pure intellectory. The most particular truths, and those which are first introduced, are those material truths we imbibe by means of the senses. all of which the mind at first accepts as they appear as so many truths; from these it arranges its rational analysis, and forms its intellect. As many conclusions as the mind forms, therefore, so many principles it assumes, provided it has faith in the premises and trusts in the correctness of its conclusions. These principles are the very truths which are in the rational mind as though they were its own; still they cannot be called pure truths but rather probabilities, for they are exceedingly inflated with hidden qualities, and viewed in themselves are opinions and hypothesis, which the mind will perceive if it inwardly considers them, and by comparing them with others draws any conclusion from them as experimentally

true. These presumed truths are acknowledged all the more as truths in the degree that they are capable of being rendered more probable and likely, or so adorned and veiled that their internal form does not appear; for we judge very much from the surface and external form regarding the internal, as we judge of the virtue of a virgin from her beauty. That accordingly there is an inborn love of establishing principles and acknowledging these as truths, or what is equivalent, of forming the intellect, has been shown above. Here chiefly we shall treat of the love of principles, thus regarded as truths [ut veritates spectatorum].

(323.) That it is natural to love truths may be proved from the order itself which is in the forms and harmonies of nature, the truth itself in intellectual things corresponding to order in natural things. And because order in itself, like harmony, affects the common sensory pleasantly and the animus gladly, so do truths affect the intellectual mind. Hence as order presupposes harmony, so does truth presuppose some love or some good from which we may predicate its being truly good or truly bad. It follows from common experience that human minds love truths so far as these establish the idea of good; for there are good things which are good by nature, and those which are apparently good, and those which are not good but bad, which nevertheless affect the mind as good. Thus one who is desirous of revenge finds his delights and his good in cruelty itself, and so long as he is carried away with this love, he loves all things which sustain it, and hates every thing which opposes. He often understands the truths which oppose such an animus, but he hates them, and also those who wish by means of truths to influence his soul. He also who is avaricious and longs for the goods of others often acknowledges the truths which show this to be contrary to the order of nature. but he hates these very truths, and loves all those probabilities which favour and foster his idea of good. Criminals often talk most wisely, yea, even make harangues, and by a chain of truths condemn their very crimes, while still in their own minds they hate these truths they are proclaiming. Thus there are those who love truths and those who hold them in hatred, or love those things which are contrary to the truth, for hatred is love of the contrary. Likewise the rational mind loves truths from an innate love, without which it would never be able to perfect its intellect so as to be possessed of judgment. But in place of truths it substitutes principles, which are so many probabilities acknowledged as truths. To love these principles or these probabilities is to exercise the same love as that by which truths are embraced. That this ardour exists in the higher mind or the soul, all of whose ideas are truths which the soul either loves or hates, appears from the effect of a similar love in the rational mind, and also from the origin of ambition and of anger, which are so many heats and fires in the soul roused in defense of these truths. For there are those who are by nature tenacious of opinion, even in their childhood resembling old age: since the aged believe their principles to be all truths. It is not so with youths who are of progressive intellect and not lovers of self.

The love of Good and of Evil.

(324.) Between the love of the true and the love of the good there is the difference as between intelligence and wisdom, for truths are the objects of the intellect, but goodnesses those of wisdom; but no intellect is without wisdom because there is none without the love of some good. Intellect is acquired through the love of understanding truths; wisdom is not acquired because the good itself is that beloved essence which flows in and insinuates itself of itself; but the intellect is required in order that we may understand whether it be the truly good or the apparently good, or that which is not good but only

a false good. The truly good is in itself good; the apparently good is good in itself so far as it so appears; the false good is evil because contrary to the true good. Thus the true and the good exist both united and separate, since we are able to love the evil and to hate the good, and yet to be gifted with intellect, to be able to understand the true and the false, or to understand that a a thing is not good although we undertake* it, this is called intellective wisdom, scientific and external. Wisdom itself cannot exist without being conjoined with love, and because all love is inborn, we cannot be wise of ourselves, but from the influx of the love of the truly good, and in order that this may flow in the liberty is given us of inclining our mind to this or that side. Therefore verities constitute the intellect which is greater in the degree that our principles approach the truths themselves and free themselves from the shadow of probabilities. In order that our rational mind may be as intelligent as possible, it is necessary that it know universal truths just as the pure intellectory and the soul knows these from themselves, to whose perfections the rational mind strives to approximate.

But goodnesses constitute wisdom. To love wisdom is to love the intelligence which reveals the nature of goodnesses, and to love the truly good itself is to be wise. Wherefore our mind always aspires to the highest good, about which there is much dispute, since every one assumes the probable good to be the highest good.

Science is not intelligence nor wisdom, but is the mediate or instrumental cause of intelligence; wherefore all science is acquired either through one's own experience of the senses, or through the observation and exploration of one's own mind, or by the experience of others. Where there is natural intelligence there is also science,

^{*} We have preferred here the reading adimus as appears in the manuscript, according to Tafel, although he substitutes odimus therefor. [Tr.

for one presupposes the other; but science does not then appear as anything contingent but as a necessity, and because it is natural for it to know this. Science is chiefly concerned with the objects of goodness.

Knowledge [cognitio] on the other hand is the mediate cause whereby science is obtained, whence are doctrines and instructions [disciplinae].

(325.) The rational mind never loves the good of itself, but judges concerning the evil and the good; and when it embraces one in preference to the other it is said to love it, because it admits the one and excludes the other. The mind admits whatever is pleasant, delightful, soothing to the animus and to the senses, or what constitutes the loves of its animus. It causes that these flow into the mind; and when it is occupied with their ideas and expels the contrary, then the mind is said to love because it calls this good; still its loves are not properly its own, but flow in. Likewise when it excludes the . affections of its animus, and thus admits the higher loves. then it calls these goods, and is said to love these because it is wholly occupied with their idea. Thus the rational mind is possessed by inflowing loves, since it is lacking in its own love, but they are called its own because they flow in and possess its idea.

Affirmative and Negative.

(326.) That the mind is able to affirm and deny clearly indicates that it is placed between two loves which influence it in either direction, and that it is able to choose the one and reject the other, or that this [liberty] is the only thing proper to the mind; without this property the mind could not exist, still less subsist. Throughout the whole body there is nothing else capable of affirming and denying. Our animus cannot do this of itself, because it is affected according to that harmony which is in an object and agrees with its own

The eve can neither affirm nor deny, but is affected by the harmony of object, and the mixture of colors, among which there is a natural order as in the The intellectory itself and the soul can not affirm or deny, but are gratefully affected by those things which are perfect in themselves, and unpleasantly by imperfect things, always however according to the nature of the soul itself. Thus the soul can only love this and hate that, but to affirm and to deny is not in its power, this faculty belonging solely of the rational mind. The truths themselves of the soul are inborn; but its state either loves these truths in themselves or hates them, so that it is impossible to love now what it before hated; but that it assumes this state is possible only in this life, and thus only by means of the rational mind, which is able to affirm and deny and to choose the one rather than the other.

(327.) In order, therefore, that there may be in the rational mind a free choice and a will, and thus the faculty of affirming or denying, there are no loves given to it as properly its own. For if it possessed its proper and natural loves, then its affirmative and negative faculty would altogether cease. But that there seem to be innate loves. such as the love of the honourable, the seeds of which seem to be deposited in the mind, and that there are inclinations to this love, this does not prove that these natural loves belong to the mind, but that the mind possesses a disposition only to receive these loves rather than others, to more easily change its states in this direction than otherwise, or to be more easily in these ideas than in others; in a word, that it wishes rather to admit these loves than others. This is, nevertheless, not a proof that love is inborn and proper to the mind itself.

Conscience.

(328.) A good conscience or a bad conscience seems to be a proper affection of the rational mind, but whether it be so will appear from an examination into its origin. Conscience itself depends primarily on the determination of the truly good. Whatever we believe to be the truly good when we nevertheless act in a manner contrary to it excites a bad conscience, while the opposite course produces a good conscience. Thus our conscience depends upon our principles, which we believe to be so many verities; and so the good conscience of one person may be the bad conscience of another, from one and the same cause. The good conscience of the criminal is the bad conscience of the honourable man.

The Devil acts against his conscience if he does not do evil, although he knows that this is contrary to spiritual truths. The conscience very plainly declares that our rational mind is midway between the higher and lower loves. A good conscience corresponds to gladness in the animus, and a bad conscience to sadness; wherefore also gladness and sadness flow by correspondence into the mind and excite its conscience. The states of the soul. also, and its loves contribute much to the state of conscience in the rational mind. The soul which loves truths. when its love reigns in the rational mind, is secretly pained by those things which oppose this love; that is, it is a true conscience. But if the soul hates spiritual truths and becomes diabolical, then the mind is distressed by these truly good things themselves when it is led by them; therefore conscience comes from the animus and the superior mind, and is such that hardly any one may know its quality, since in order that any one may judge of the truth of one's conscience, he ought indeed to know what the truly good is, of what quality is the person's mind and his animus; which knowledge belongs to God alone. The conscience itself judges every one.

The Highest Good and Highest Truth.

(329.) This is undoubted, that there is a good in itself and a principle of this good, that it is principally good itself and love itself. And if there is a good in itself it is necessary that all those things which flow from that good and which tend toward that good be good in themselves. But whatever things tend out of the course and still more what are contrary to this good and tend not toward it, these are evil in themselves and in so far evil as they are removed from that good. Hence it is manifest that nothing but God alone can be the good itself, who is the fount of every good, that is, of every perfect thing. But things evil and imperfect may appear in our minds as good and perfect, and thus persuade us to embrace them. Still in the purer and more elevated mind this is not why we embrace things which we acknowledge to be evil, but evil things are embraced because they are soothing and agreeable to the state of our mind; then also they are sometimes called necessary evils.

From this it now appears that every one embraces and calls that the highest good which agrees with the state of his mind. Thus to the revengeful vengeance is the highest good, to the miser wealth, and so with other lusts. In a word, each one places the highest good in a good conscience; but it is to be observed of what sort the good is, whether the truly good or the falsely good. Thus universal truths are to be investigated and our minds to be instructed by these.

- (330.) The highest good presupposes also a highest truth, and whatever affirms this highest good is itself the highest truth, and other things are false. But true things are also evil, hence the highest truth means that which expresses the nature itself of anything, what it is in itself, thus both the nature of the good and of the evil.
- (331.) The good in the mind signifies the perfect in nature, wherefore these mutually correspond. Perfections

themselves are superior and inferior; thus the highest good differs in itself or is divided according to the subjects themselves which admit that good. The highest good of the body is the pleasure which most affects the body. The highest good of the animus is that love which most affects it. These goods are in themselves supremely good in respect to the state of body and of the animus, which receive and are affected by them. Similar is the case with the mind, the soul, and the pure intellectory. The highest good of the rational mind is that which it most joyfully admits and chiefly indulges, or to which its ideas or changes of state incline. All these things are highest goods in themselves so far as they tend to the highest good in itself and regard this, that is, so far as they are in connection or united by love with the highest good.

(332.) Every faculty and mind, whether superior, inferior, or mediate, aspires to the highest good from an implanted love; nevertheless it can never arrive at that degree of good in which is the superior mind, since there is something of the infinite in the superior mind to which the inferior mind can never attain unless by being itself dissolved or destroyed. The highest of the lower mind can hardly be called the least of the higher mind. We can thus see that our rational mind is unable to think what will be the happiness or the unhappiness of its soul; and if it cannot think this, neither can it express it. The same is true of the highest truths. Our mind may progress indefinitely and diffuse its intellect, and yet never arrive at pure truth such as is in the soul, unless it be dissolved and destroyed. Thus we cannot penetrate into the nature of the pure intelligence or the intelligence of the soul. A limit is accordingly placed to the advancement of our intellect, or beyond which it cannot go; but still there is given to it a field that it may be extended indefinitely, and the love to so extend itself is naturally in it. But if it wishes to be elevated above itself or to attain to things higher than itself, then it either perishes and is dissolved or else it is reduced into such a state that it can never again emulate such a condition, and so it sins against the love and the law of order. Still such a love as this is innate in our minds, and we receive it as it were hereditarily from Adam. In a word, All that which is good and true in itself is Divine; all that which is evil and false in itself is diabolical; all that which is good and true in appearance and semblance is human; thus the just, the sincere, the honourable, virtue, etc., etc.

The love of Virtues and of Vices; the Honourable; the Decorous.

- (333.) The honourable is the common quality of all virtues, for all the virtues taken together constitute the honourable. Thus the honourable is the form whose essential determinations are the virtues in particular. Each virtue is a form whose essential determinations are the parts of that virtue. But decorum is the external form of the virtues; for that the virtues may appear an external is required from which we may judge regarding the honourable in it and its parts. This is why the decorous can be varied in so many ways. Every form may be varied externally in a thousand ways, and also the states of the internal form may be varied, the external form remaining. This is our political art, to persuade regarding internal things those minds which judge from external things.
- (334.) The dishonourable, on the contrary, is a form whose essential determinations are vices; and every vice is a form whose essential determinations are parts of that vice. The indecorous is the external form, for every internal form has its external form, which is called the figure and which corresponds naturally to the internal form.
- (335.) There is nothing which is a virtue in itself except the good in itself. But in order that virtue may exist and pass for such there must precede an affirmative and

negative, a rational intuition that the good is to be chosen; there must be a will and an end which we regard as good. These faculties are not formed except in the rational mind; hence no moral virtue proceeds from other than the rational mind. If an inanimate machine should extend money to some poor person it could not be called a virtue: if any one benefits another without knowing what he does, or from an opposite intention, or of necessity, this is not called a virtue. If an insane man renders service to society, this is not a virtue, but a good. Therefore whatever is natural and necessary loses the name of vir-Thus all virtues are of the mind only. Likewise in respect to vices. There is no vice which in itself is vice: only the evil is evil in itself: the mind itself is what causes that the morally vicious exists. Thus all morality, like all vice, is of the rational mind alone.

(336.) What accordingly the virtues are and what are vices I have set forth above, when treating of the affections of the animus, for instance, of ambition, love of self, love of country, revenge, anger, avarice, and other traits. All these are either goods or evils in themselves; but still they are not called virtues or vices except so far as they proceed from the rational mind. Accordingly as the mind is the more instructed and the intellect greater the greater is the virtue or the vice which flows thence. Thus the love of self above all others is an evil in itself, and if such be in the mind it is a vice: while the love of the many or of society above self is good in itself, but is not called a virtue except in the rational mind. Virtue accordingly depends upon the state of the rational mind, so far as this regards the good which is the real good, or the not truly good which is the evil. When the mind does not know whether it be the truly good or the truly evil it is held in suspense and its conscience is said to be doubtful. In this state it ought to do nothing, because such action would be neither good nor bad, and thus not rational, but brutal and irrational, or like that of an inanimate machine. Therefore as the mind judges concerning goods so it judges concerning virtues and vices.

- (337.) It is therefore the rational mind which qualifies all those affections which are ascribed to the animus and to the body; these are all what they are by virtue of these proceeding from the rational mind. Wherefore it is unnecessary to treat of them particularly here, since they all insinuate themselves into the loves and goods of the [rational] mind, and this by its will determines them into act. This is the reason why nothing which flows into the rational mind but only that which flows from it can be called a virtue or a vice; and the greater a virtue is the more does that which flows in under the form of good persuade the mind that it is such a virtue, when nevertheless it may be a vice.
- (338.) The question now arises whether any love of virtues or of vices belongs naturally to the rational mind. It is proved by experience that the seeds of honour are sown in the minds of some or that there are inclinations to what is honourable, and so the reverse: but whatever there is from nature in any mind, which without cultivation is no mind or which must be formed in order to be rational, and which possesses nothing from itself or nothing but that which is acquired, it would seem that the love of virtues is not a love proper to the rational mind, but rather that it belongs to the superior mind which flows in and constitutes this its nature. This takes place if the love of good flows in; and this good is called virtue when the mind rationally observes that it agrees with the nature of good. Thus we cannot say that the love of virtue is proper to the rational mind, but that the soul from which that love flows is good, or also that the mind is naturally such that it inclines to receive these rather than other loves; thus its inclination is only a faculty of bending itself to the reception of this or that love.
 - (339.) But in so far as the rational mind applies itself

to either side, it is also receptive of the truly good and of its love, and it becomes conscious of this good, and from this love flowing in it wishes and desires its actual attainment; so far therefore the love of virtues and of vices may be predicated of the rational mind, for by this faculty it appropriates to itself as its own these goods or evils.

XVII.

CONCLUSION AS TO WHAT THE ANIMUS IS, WHAT THE SPIRITUAL MIND, AND WHAT THE RATIONAL MIND.

(340.) The animus is a form whose essential determinations are all those affections which flow in from the body and from the world through the gateway of the senses. In each affection there is present as it were a special animus whose essential determinations are all those affections which are parts of this affection, and so on. Such an animus is our peculiar disposition or genius, wherefore we speak of indulging our disposition or animus, and by the ancients every genius or disposition was adored and worshipped as a god, and over them all presided a universal god; hence Jupiter, Apollo, Venus, Mars, and the rest, and other specific deities belonging to these. In sacred and common language all those affections of the animus which come from the body are said to come from the heart, as when we say "With the whole heart," or "With the whole soul," or in using the words pitiful [misericors], stupid [excors], insane [vecors], and so on, which terms all have reference to the blood.

The spiritual mind is the form whose essential determinations are all those loves which flow in from above or from God, through His Spirit by means of the Word, and from heaven and the celestial society of souls.

- (341.) This mind is properly called the spirit, whose subject is the soul; thus the soul is indeed called spirit, but more properly would be termed spiritual.
 - (342.) The rational mind is the form whose essential

determinations are all those loves which flow-in both from the spiritual mind and from the animus. These become mingled and are called rational. They are not the property of the rational mind, for they do not remain if the spiritual mind or the animus withdraws them. But properly speaking the rational mind is the form whose essential determinations are all virtues and vices. For it is its property to be conscious of the good and the evil, thus to choose those things which are good and to reject the evil, and that which goes forth from the rational mind is called a virtue or a vice. In every virtue and vice a rational mind is present whose essential determinations are all the parts of that virtue or of that vice.

(343.) I have also mentioned a certain mind higher than the natural which, for instance, is in the pure intellectory; but this mind is the animus itself, since the animus is something universal and the mind of each intellectory is something particular, for in order that the universal exist there must be the particulars from which it may exist and subsist.

That the Rational Mind is that which is properly called Man.

(344.) The external shape is not what makes man, for the ape is human in face and still is an ape, and wax can be moulded into the human form and still be wax, while yet the likeness of man. Neither is it the external form of the body which constitutes the man. The brute animals enjoy similar members and viscera and a similar structure as do even the more imperfect animals like the insects. Speech does not make man, for the parrot talks and still is not a man. The animus is not the man for the brutes enjoy a similar animus and are affected as man is by the loves of their body and of their world.

(345.) But that which enjoys a rational mind, in namely that it can think, judge, freely choose and will, that crea-

ture is man. Also a man is esteemed as such by all according to his rational mind. If he only indulges his animus and his natural disposition, if he is stupid and dull, he is called a brute, an animal, and not recognized as man except as having still something human which enables him to think. The greater the intellect or the more elevated the rational mind so much the greater is the man. If it excells all others it is declared to be superhuman and divine, and something which is above man.

(346.) We also in ourselves recognize that only as our own which we mentally possess, for every thing in the whole system is qualified by the mind; wherefore all loves, as well superior as inferior, flow in and flow together into the rational mind as into its centre, and from this they flow forth again. Thus the beginning of all actions, and the end of all sensations, or the concentration of the whole, is in the mind. Wherefore all other things which are without the mind are regarded as its instruments and organs, which the mind neither knows nor cares to know as to what they are, provided only they serve it as its slaves. It even seems as if God thus held in contempt these natural things themselves, and reduced them into so many instruments, since He has not revealed to us their nature, or how the mind acts by means of them, but has only given them and surrounded the mind with them, in order that they may stand ready and obedient for every effect by which the mind wishes to promote its end.

(347.) We only love that which is pleasing to this same rational mind as if to that which is proper to ourselves, for every one wishes to appear such as he is by virtue of his mind; even if it be through the ornaments of the body, still the desire is that these may show the quality of the mind. Thus we feel a hatred and often are carried away into anger toward that which injures

this mind; and what we fear for the body is lest the mind be deprived of its instruments and powers of acting.

- (348.) In the rational mind there is the face of the soul just as in the body is the face and likeness of the animus. The rational mind may thus be called the body of the soul, because it is formed into an image of its operations.
- (349.) This mind indicates what the soul is. If the soul be not spiritual and immortal by no means can such a mind be formed in which the spiritual and natural are conjoined. Wherefore since there are in the mind both the natural and the spiritual, the mind possesses these in order that man may possess something in a certain centre of confluences; wherefore the rational man is what is called man. When this mind is destroyed the man perishes. He then is a spirit, because the soul alone then lives.
- (350.) This is the reason why man may be called internal and external. That spiritual [essence] which flows into the rational mind is the interior and superior man; but the natural which flows in from the animus is the external man. The mind is what perceives in itself what it is which the external and internal man advises. Therefore the external man is the same as an animal; but the internal man the same as an angel.

XVIII.

FREE WILL, OR THE FREE CHOICE OF MORAL GOOD AND EVIL.

(351.) The learned have been in great disagreement on the liberty of the human mind. There are those who assert that in divine and spiritual things there is no mental liberty left: or if any, that it is but shadowy and hardly to be recognized as such. There are some who say that all liberty is left in worldly and corporeal things; but others declare that this is rather slavery than liberty, for the rational mind [mens] is thus kept in chains by its affections belonging to the lower mind [animus]. And there are others again who assert that there is no liberty at all, although it may appear as though there were; for [it is alleged] we are drawn away either by our own loves or by other affections which flow into the sphere of our own minds, or by some absolute and divine direction which carries us away as by a stream, or as a ship in full sail. Moreover, if the rational mind has no affections of its own, but if all flow into it either from above or from below, it follows that the mind would not be in the exercise of its own right or free will, but would either belong to the soul or to the body, by the affections of which it would appear to be as it were inflamed. But let us dismiss all these controversies, since to assume arguments and then to confute them is a barren occupation. For if we remain in arguments derived [solely] a posteriori, or from a multitude of effects [only], we shall indeed be in collision, and our minds will as it were be in a dense and dark forest, nor shall we be enabled to extend our view beyond the nearest hill or the nearest tree. Let us then rise to higher views, or to the principles and origin of things, or to universal truths, and from these let us descend according to order, nor turn from the way to refute any one, but continue straight on to the goal.

(352.) That our rational mind can freely judge and decide, or freely think, and when impossibilities do not hinder can freely will and act out what it thinks, is acknowledged by every one. Without the liberty of thinking, or of acting conformably to what we think, there would be no understanding and no will; yea, the very name of will would be banished from the vocabulary, and we should know nothing about it. Without free will there would be nothing affirmative and nothing negative, there would be no virtue and no vice, and consequently no morality. There would also be no religion and no divine worship, for this requires a free mind. Thus, there could be no hearing of prayers, still less any imputation [of good or evil], because nothing could be regarded as our own. For who imputes anything to a machine, or to him who acts from necessity and not from himself? Men also regard actions, as they proceed from a will which is not forced; what then shall we not believe of the divine justice? In short, without the gift of liberty we should not be men, but merely animals. For what would our human principle be, or that which is properly our own [as men], unless we could think, will, and act freely? and he who can think freely, can also will freely, for will and action follow thought. Therefore not only to be free. but also the ability of acting freely from one's self, is truly human. It was also shown above that the one only thing which belongs to us is that liberty which is called voluntary.

(353). It is also an established truth, that without intellectual life or understanding there is no [rational] liberty, and that such as is the understanding, such is the liberty, which increases or decreases together with its

understanding; so that liberty may be called the spouse of the intellect, or the one only love of the rational mind. For there is no liberty in an infant, but in adults there is liberty. There is none in an insane or delirious mind, and none in the dead,* the intellect being extinguished. From these things it follows that there is a greater liberty in an intelligent than in a stupid person, in a learned than in an ignorant man, and so forth: for this is a consequence of what has been stated.

(354.) But inasmuch as we have formed an erroneous opinion of the essential nature of liberty, we can scarcely comprehend that it increases according to the degree and excellence of the intellect; for we always believe that that man is the more free, or in the enjoyment of greater liberty, who is more powerful and wealthy than others, and who is thus left to himself [that is, who is less under the restraint of external circumstances]. Thus it is supposed that the commander is more free than the soldier, the king than his subjects, and every master than his servant, although the servant might be most intelligent. Yea, we might [under certain circumstances] pronounce that man who is shut up in a prison, or cast into chains, to be more free than one who lives in the exercise of his own right and free will. But when we speak of the essential nature and perfection of liberty we do not understand its external but its internal form. For the captive and the servant may potentially be more free than his master, although not actually so. A man who is compelled to be silent may be more intelligent than the perpetual talker, and the man whose eyes are bound may have a more acute sight than one whose eyes are open, that is, in potency though not in act.

^{*} This is in strict accordance with the Latin, nulla quoque in mortuo, extincto intellectu. We are not to infer, however, that the author here denies a conscious immortality of the human soul, but that, being free from all connection with the body and its desires, there will no longer exist that field of free choice between the good and the evil which here is offered to us in our rational mind or intellect. (See chap. xxvii.)

(355.) We are in the habit of confounding liberty with license, namely, to indulge our natural tempers and to obey the wishes and lusts of the lower mind, to be able to give the reins to our bodily appetites, yea, to allow the insane cupidities of the mind to break out into corresponding acts. This is not liberty but license: for there is a true liberty, an apparent liberty, and also a false liberty which should be called slavery. True liberty does not consist in being able to think and to act according to our thoughts whatever they may be, but in being able to think and to judge wisely [which ability increases according to the developed state of the intellect], and to act according to right reason, that is, to choose what is good and to refuse and repel what is evil. To give the reins to our animal or external mind [animus] is to rush into our own destruction both as to body and soul, and to embrace that which is really evil for that which is truly good. Wherefore of such a man no liberty can be predicated, but rather slavery; for our rational mind is continually governed by loves, of which some are good and others are pernicious. This, therefore, is liberty, that the rational mind is able to cast off the yoke of its animal mind, and not to suffer itself to be governed by pernicious loves, but by loves which are truly good. This is also the end and object why that liberty is given to us.

(356.) If we do not well consider the liberty of the will and its free determination we cannot avoid forming a spurious notion concerning it, imagining that it is something separate from the intellectual principle of the rational mind, or if it be adjoined to it, that it is, in itself, something per se or of itself; whereas it is [only] a quality which results from this intellect itself. For if it increases and decreases with the intellect, and if it does not exist in the first period of infancy, and if, moreover, it is of such a nature as is the state of the intellect, it follows that it is in the intellect in like manner as a quality is in its subject.

(357.) In order, therefore, that we may acquire a genuine idea of this liberty it is necessary that we again describe what the intellect or understanding is, and in what manner it is formed. The intellect, as we have shown in its own place, consists of mere intellectual ideas, which are first formed from material ideas; for the thought itself is nothing but an unrolling and revolving in the mind of such material ideas, from which, when they are collated into a certain form, results the judgment or the mental conclusion in which the ideas are together, or simultaneous, which in succession come into thought. It is also confirmed above, that the ideas of the memory, of the imagination, and of the thought, are nothing but changes of the state of the internal sensory and of the intellectory, and that such changes can take place in the sensories and in the intellectories in infinite variety, for their perfection consists in the mutability of their states. Wherefore in the sensory, and especially in the intellectory, as many changes of state can be produced as there are ratios, analogies, series, equations, and varieties of forms in numbers and in geometry, in their highest and most perfect developments. Thus there are changes of state which are general and particular, universal and singular; that is, general, special, individual, and of manifold variety, simultaneous and successive, co-ordinated and mutually subordinated one to another, and subdivided; that is, there are as many states and of such a nature as there are equations in the calculus of infinites, with which equations and their forms they may be fitly compared. We therefore perceive in the mind that this faculty of changing its states is the very faculty of producing ideas, and that in which intellectual power and action consist. Let us, however, substitute [for this "faculty of changing states"] the common names, intellect, ideas, thought, principles, judgment, and the rest, which while they do not precisely correspond, nevertheless are terms more familiar to us and do not embarass our understanding.

(358.) Wherefore liberty itself consists in producing changes of state in the sensory, and consequently in the intellectory, or in putting on states which harmonize with this or that end. For we can turn our thoughts in whatever direction we please; and in whatever universal state we keep the mind fixed no other ideas can flow into that state except those which belong to it. Every thought is a form which is constituted of essential determinations. Into this general form so constituted nothing but particular determinations which harmonize with it, can flow; or if it be a universal idea, no singulars or no particular ideas can flow in but those which naturally determine that universal idea. Hence, such as is the state of the mind such are the ideas which flow into it, such also is the form which hence arises, and such is the affection of the form, or the love. Other things which do not harmonize with that form are either not admitted or are reflected back, or if they be in it they are ejected and repudiated as heterogeneous and as destructive of that form. This we manifestly experience every moment; for when we fix our thought on any subject we then repudiate and reject all those things which are not similar, as though they were discordant, as when with intention and desire we contemplate any object we love to acquire, as honour or riches, or if we experience the venereal passion. the mind then remains fixed in that state, and admits all those things which contribute to the attainment of the object, and rejects those which endeavour to destroy that state; and the mind thus strengthens and kindles itself to that degree that it cannot be diverted from that state into another, and if perchance it should fall from that state it is saddened, and endeavours by ruminating upon it to recall and restore it, and if it does not succeed it is dejected and comes into a contrary state, which is wont to do violence to our rational mind. But let us return to the consideration of liberty.

(359.) It is conceded to our rational mind not only

to change its states and to lapse from one thought to another, but also to become conscious of and to survey, or to have an intuition of all those particular ideas which have entered into the general state. Yea, we can thoroughly investigate that state, and see by what love it is governed, and how it is kindled; and we can also compare this state with another, and ascertain which is better and more suitable to the order of nature. It is this faculty which, in the rational mind, is called liberty. Hence we may manifestly see that liberty is of such an extent and nature as is the intellect, and that both are conceived, born, and developed together.

(360.) But the liberty itself of the human mind, which may be called intellectual liberty, can be reduced into certain classes and thus more distinctly conceived: for there are as many divisions (parts) of liberty as there are of the intellect. The divisions of the intellect are intellection, thinking, judging, concluding, resolving, and willing, by which what we think, etc., is determined into act. The liberty of intellection is the least of all in degree, since it is with difficulty we can prevent sensations from flowing in, that is, material ideas from hearing, sight, and the other senses; consequently it is with difficulty we can prevent these sensations from exciting the animal mind, and this again from exciting the rational mind to various desires. For there are pleasures and delights which pleasurably excite the rational mind, and carry it away naturally into such a state. Thus the cupidities themselves of the animus, which arise from the body and from the world or from our associations in the world, can scarcely be prevented from flowing in, except we were to remove the organs of our senses, yea our very selves, from the impressions; or when they do flow in, turn our minds away from them, which indeed is almost beyond our human nature. The thought immediately takes up the perception derived from without; thus also the liberty of the thought, which like the thought itself is complete.

For we can turn the mind when once excited by ideas in whatever direction we please, and admit into it ideas from the store-house of the memory. And again we can reflect upon these ideas individually, which become as it were so many new observations and excitements [to ulterior ideasl. This liberty is a universally-governing principle in the human mind, from which we can see of what quality we are, or what is our real nature; that is, to what loves we incline, what loves we most willingly admit, and in what affections we most delight to indulge. Thus from our very thoughts we can perceive what is the use of liberty. The judgment takes up the thought, and it consists of so many principles which have been already formed, and which the rational mind considers as so many truths. These principles are so many intellectual ideas, and are formed from conclusions arising from the ideas of thought. The liberty of the judgment is not of so much extent as the liberty of thought; for before things are admitted into the judgment, that they may be considered as things judged, only those things are elected which we believe to be truths; or if we do not believe them to be truths we can, from the intuition and balancing of several kinds of love by which we are affected, so temper and moderate the analysis of our thoughts that they may as it were appear under a becoming human aspect. mind may then contemplate the present not only from the past but also from the future; for one equation is as it were formed, in which all things are, and which can even contemplate and judge, as to possibility at least, of the future. Wherefore the liberty of the judgment is more restricted to a certain natural order than the liberty of thought, which not being under such restraint is accustomed to wander. There may, however, be hidden in that liberty of the thought a love, which from the fear of losing another love can be restrained. But to enter upon this subject now would be too prolix.

The conclusion immediately follows the judgment; for

we come to a conclusion in order that what we conclude may be remitted to the will, and by that be determined into act. Thus the conclusion is as it were a line drawn under the equation or under the sum, which is soon again to be resolved into its parts. In this conclusion it is clearly perceived of what nature liberty is, or what it had been in the judgment and what in the thought. For in the conclusion there are all things together; and if they do not come forth into act they are nevertheless there, so that it is only a contemplation of future consequences, and hence a fear regarding the desired end, which act as so many resistances and as it were impossibilities delaying or preventing the act; but immediately these fears are removed the act rushes forth. mental liberty, therefore, is under much restraint; and in order that it may be restrained there are civil laws and penalties, the estimation in which we desire to be held by others, misfortunes, and other things, which restrain. But the mind when in its conclusions is to be considered as already in its acts. The mind, however, still retains its liberty of dissolving and changing its conclusions, and of forming new ones. But this liberty is very feeble, since there is generally within it the love of self, consequently the love of one's own ideas, which it estimates as truths.

To this liberty succeeds the *liberty of resolution*, as if the equation were now to be actually and successively resolved into its parts; and as the particular things which are in the conclusion are to be successively evolved or brought out by actions, either of the members of the body or of the face or of the tongue or by the speech, there remains no liberty [as it were] to this faculty, for it depends on the essential principles which are in the conclusion; since the faculty itself of resolving the equation is not any intellectual operation, but a purely organic one, and dependent solely on the intellect. If any thing be determined without the intellect it is considered as some-

thing animal, which is not regarded as virtue or vice, or considered as worthy of praise or of blame. Of the will I shall treat below.

- (361.) From what has now been said it appears that there is a liberty of thinking and a liberty of acting; and that in the middle between these two there is as it were the liberty of choosing [arbitrandi], in which properly free will consists; and that our mind is not capable of ruling whether the objects of the senses and their exciting influences, both from the body and the world, shall flow in or not, but it is capable of choosing whether these sensations and excitements shall flow out and be determined into act.
- (362.) In respect to the liberty of thinking and judging it is almost absolute, but such as is the intellect such is the thought and consequent liberty. Essential freedom consists in controlling the thought itself, lest it rush forth whither cupidities would urge it. For if cupidities are admitted into the thought, and are not checked and restrained on the very threshold, they easily take possession of the entire mind, which in that case is no longer its own master. Hence true liberty consists in the mind's ability to command itself and to cast off the yoke of its animus. It may also be physiologically demonstrated how this is effected.
- (363.) But the liberty of acting is much restrained, since there are innumerable things which prevent every thought from coming into act. Thus there are civil laws and penalties; there is the sense of honour and decorum; there are perverse ambitious propensities which are adorned with the pretexts of truths; there is the respect we have for persons whom we must obey; there are the necessaries of food and clothing, for the acquiring of which there are innumerable means, all of which [as means] have to be regarded even while the ends are kept in view. There are certain kinds of love which prevail in the mind to which special loves are subject, and other

things which are also restraints. There is, moreover, the conscience itself, which is a peculiar bond of restraint, and also a code of laws, in which are inscribed those things which restrain the mind. All these things are to be considered as necessary restraints, which take away from liberty the power of expatiating [in the ways of licentiousness]. Therefore as to the thought itself there is entire liberty, but as to the act there are many limitations and restraints, which however exist and operate that we may enjoy true liberty, and that we may not abuse it. The highest liberty, as already stated, consists in governing our own minds so that we may live in harmony with the order of nature, and on this account liberty is given to us. But how insane the human mind is, and how it suffers itself to be governed by an inferior master or by the propensities of the animal mind, is abundantly evident from experience. Thus it is evident that our desires must be restrained by laws; and we ourselves often fear lest that which possesses our minds should by some characteristic mark break out in our actions, our speech, or our looks; the greatest art consists in concealing one's own mind.

(364.) But the liberty of deciding, which is free will, coincides with the liberty of judging, and properly signifies that state when the mind is balanced between two kinds of good or two loves, and can choose that which appears to it best, and determine it into act. For this purpose intellect is given to us and liberty is adjoined to it, although some men in the use of this faculty determine it against truths or against their better conscience. This happens when the loves of the lower mind prevail, which is sometimes attributed to human weakness, and by this abuse of our liberty we inflict injury upon our conscience.

(365.) Therefore liberty itself, or the faculty of freely thinking, consists solely in that ability by which the mind can put on whatever changes of state it pleases, and thus

proceed from one state into another. For every change of state produces an idea, either simple or compound; thus there are as many changes of state as there are varieties of thoughts and judgments. These things are said concerning that which is the essence itself of liberty.

(366.) But it was observed above that there are loves which perpetually govern our intellect, and that no thought whatever can exist and subsist without some love as a companion which enkindles it; for love is the very life of thought. But how loves operate in the mind shall be considered and explained in what follows. From this, however, the inference might seem to be warrantable that if our rational mind is perpetually governed by certain loves, desires, and ends, there can be no liberty, or only of such a character as to be subject to some love which governs or commands it; on which account there appears to be a certain necessity in every particular [of the mind]. It is also most true that in so far as the mind is governed by perpetual desires, without which it would be no mind, it is not its own master and the arbiter of its own states: but essential liberty consists in this, that the mind can turn itself from one love to another, that is, can resist and reject a love which is evil or apparently good, and devote itself to a love which is truly good or which it judges to be so. Wherefore liberty does not consist in this, that the mind be without any love, desire, or [actuating end], for in this case it would cease to be a mind; but liberty consists in the ability of adopting one principle of love and of rejecting another; and indeed genuine liberty, namely, that which accompanies a more perfectly developed intellect, consists in adopting the best love [as the principle of its life]. For if an evil love or principle is adopted it is a sign of a perverse intellect. namely, of an intellect governed by perverse loves, and thus it is a sign of the absence of liberty; however, by imperfect intellects, liberty is predicated of this license, or it is considered that to will and act freely, according to

any kind of prompting love whether good or evil, is liberty. Whereas, according to the judgment we form of the liberty from which we act such is the intellect; thus there may be the highest liberty where slavery itself appears to exist. The reason is, because to be subject to the highest good as to a master is a subordination which is eminently according to the nature of things; for in the order of things one thing must govern and another must obey. Wherefore that which is superior, prior, and more perfect must give laws and commands to that which is inferior, posterior, and imperfect. Hence if the mind subject itself to this universal law of subordination it is most free. For it cannot alone hold the keys, since it cannot depend on itself; wherefore to choose and adopt the highest good is to adopt it that the mind may serve that which is more perfect, and suffer itself to be governed by it. For if a servant rise up against his master, or a subject against his sovereign, or a soldier against his commander, this rebellion is not liberty but lawlessness, which destroys universal society, or an entire army.

(367.) There are in the rational mind diverse loves. which hold sway and draw to their side; but let us pass over this phalanx of loves, and distinctly penetrate the subject [in question]. To this end we will only consider that in general there are superior and inferior loves; the superior are spiritual, but the inferior are natural and These being concentrated in the rational mind are wont to contend against each other. The superior loves, because they are spiritual, are more perfect; but the inferior loves are imperfect. The former are constant and perpetual; but the latter are inconstant, and in a short time they terminate altogether. From experience it is abundantly evident that these loves continually reign and divide the mind between them, and that whilst one governs another yields and is as it were extinguished. In order to see this we have only to attend to ourselves, when our mind is deeply and long engaged in

a subject of meditation which has been enkindled by some corporeal love; in which state if we desire to recall spiritual and purer things into the mind we find it to be impossible, before the former love with its meditation is expelled. Thus when we wish to call upon God in prayer, the thought can never come forth in its purity and clearness, but is as it were clouded and dark until the merely natural thought is expelled and dispersed; as when we desire to penetrate into a purer region of thought, or to arise from nature into spirit, it is as though the thought emerged through a cloud into the light of the sun, which can not be done before the cloud is dispersed; but as soon as the clouds are dissipated a certain solar splendour shines forth upon the mind. Thus it is precisely when corporeal and worldly loves obsess the mind. and when the mind whilst in that state desires to penetrate into spiritual things.

(368.) From this description it appears as though these loves were contrary to one another because they are in conflict together, or as though the affections of the animal mind are as it were waging constant warfare with the loves of the purer mind, when, nevertheless, the soul has associated nature to itself when it adjoined itself to a body: and it is evident that God did not join spiritual things with natural that they should be in war with each other, but that they should be mutually conjoined. But it must be well considered that the lower mind, with all its affections, is associated to the body, inasmuch as without it the body could not live, nor could any rational mind exist, and that there is no affection which [in itself] is not lawful, and which does not spring from the universal love which is in the soul [as its actuating principle]. But the reason why they are at war is because the inferior loves desire to govern in the court of the mind, and to exterminate the more perfect loves, and thus to govern the soul itself which is contrary to the very order of nature, namely, that that which in itself is inconstant and

imperfect should govern that which is constant and perfect: for in this manner universal nature, as to its order, would be ruined and destroyed. Another reason also is, because the animus, with its peculiar affections, since it is devoid of reason, knows no moderation and rushes whithersoever cupidity carries it along, and thus to the destruction of the body and even to ruin of the soul itself, as we shall demonstrate below. For thus the affections of the animus are always tending to excess, and know no bounds nor moderation. This is the reason why the rational mind. furnished with intellect, is set to preside over these affections of the animus, and that there is a perpetual battle [between them]: for the soul well knows that such a liberty would endanger her entire kingdom and cast her down from her throne, wherefore she combats as much as possible [against these lower affections], until she at length triumphs or gives herself up as conquered. For the soul, from its own nature, resists every force and every assault by which the economy of its body is destroyed, and by which its spiritual loves are extinguished, or if not extinguished are changed into such as are contrary to truths. If, however, the loves of the animus should subject themselves entirely to the loves of the soul there would then be no warfare, but the man would live in a most happy state, that is, he would live as in his primeval golden age, or as in his first infancy; but then there would be no intellect, which [as is the case now] must be formed and instructed by the senses and the affections of the animus; and that it may be free it must know what is good and evil, which it would not know if all things proceeded according to their order. Wherefore all the passions are so many warm emotions and excitements of the corporeal life, which are all allowable, provided they in moderation be made subservient to the use [of what is rational and spiritual].

(369.) The rational mind is therefore constituted in the middle between inferior and superior loves, which

combat against each other, and endeavour to possess that mind. Thus the rational mind is as it were a balance, and the intellect with its liberty holds the beam from which the two scales depend. One scale belongs to the body, the other to the soul; or the one belongs to the animal mind, and the other to the purely rational mind. Into the scale belonging to the body there constantly flow powers like so many weights, which affect and occupy the rational mind; for they enter in through the doors of the senses, from the world and from the body itself and its blood, so that the mind can never be exempt from their operation; yea, it is formed by these things so as to be a mind; for we must be informed and instructed by the way of the senses. But the loves of the soul, or the pure loves, do not enter in by any way of the senses. but are insinuated in a most secret manner from within: not do they come to the consciousness of our mind, because they are too pure for its purest ideas to comprehend; but they are like so many forces which insensibly occupy [the mind], for they have had possession from the first stamen of its existence even to its birth, although no rational mind then appears to exist. Hence it may easily be judged that the loves of the body would prevail, and that the loves of the soul could not be conceived of as to their quality by our mind, except by an idea fixed in those things which are obvious to our senses, and with which a comparison may be established. For the soul itself cannot instruct us-nothing belonging to it is allied to words, nor can it be expressed in speech; thus it can not sensibly flow into the consciousness of the mind. From this cause it follows that the rational mind can but with difficulty enjoy the gift of its liberty, but is as it were carried away like a captive by the scale of the body. We therefore now inquire, What is the nature of liberty in natural and corporeal things, and what is its nature in spiritual divine things, and how, from natural liberty we may be led into spiritual liberty.

- (370.) Liberty purely natural does not exist; for liberty without a spiritual principle can not be called liberty; but liberty can be predicated of the rational mind, because that mind can determine itself from what is natural to what is spiritual, and vice versa; for except there was a scale which could be raised or depressed, there would be no equilibration and consequently no balance. is indeed a certain libration between various affections which are purely natural, for that which prevails bears down the scale, and one affection is ejected while another succeeds: but these are like weights of various material and magnitude which are placed in the same balance; for one kind of natural affection as well as another equally depresses or averts the mind, and prevents it from being raised to superior things. Liberty, therefore, in natural things, or the power of betaking ourselves from one natural love to another is not liberty but is rather servitude; because the mind, which ought to choose that which is best, is in that case either drawn into an apparent good or into an absolute evil. For the liberty of exercising savage rage against enemies, even when conquered, of defrauding friends of their goods, of living sumptuously, and of aspiring at pre-eminence over others, is not liberty but servitude; for as was stated above, to be able to conquer oneself, that is freedom. In the meantime the mind has full liberty of removing itself from spiritual and divine things, and of determining itself to corporeal loves. But provision against this is furnished in the forms of government, in established laws, and in penalties imposed upon crimes and the abuse of liberty. As another preventive, there is also the dread of losing one's earthly enjoyments.
- (371.) There is also no [purely] spiritual liberty in the rational mind; because the rational mind can understand nothing of any superior love, that is, of those things which are above itself. For that which is superior can judge of inferior things, but not contrariwis. Nor can

the mind perceive that it is in any spiritual love, because it cannot form an idea of it except this idea be affixed to something natural, that it may by comparison understand of what nature it is: consequently it cannot experience any sensible delight when it is in a spiritual delight, except that it can imagine it to be something more perfect, more stable, more illimitable, something as it were infinite, perpetual, immortal, and something incomparable in respect to that which it perceives to be inconstant, limited, finite, and something mortal and to have an end. Nevertheless, that the mind may turn itself from those things which are perceived and felt to be something, and likewise present, faith is required; for the mind cannot of itself perceive that such things exist, since the mind when it directs its attention hither perishes as it were in a kind of abyss. This faith is either intellectual or divine. Intellectual faith can be acquired by an inmost reflection and intuition of things; it is, however, easily extinguished when material ideas come over the mind. But faith from a divine origin is the only faith which can persuade the mind about spiritual things otherwise not capable of perceiving them. Moreover, since the rational mind cannot of itself acquire such [spiritual] ideas, neither is it gifted with the liberty of putting on those states which agree with spiritual loves.

(372.) We therefore now inquire, In what does liberty really consist; since there is none in purely natural things, and none in spiritual things, and since the mind cannot of itself turn itself from natural to spiritual things? But if we thoroughly examine and investigate the essence of human liberty, we shall find that it especially consists in this, that our mind can shake off natural loves, or withdraw and deliver itself from them, and retain only so much as is requisite for the support of the body; for to put off all natural things would be to put off the man himself, or to deprive him of animal life. The mind can

perceive that whilst it is immersed in corporeal affections, it cannot possibly direct itself to spiritual things.

[THE FOUR CONSTITUENTS OF LIBERTY IN NATURAL THINGS.]

- (i.) Liberty, therefore, in natural things consists, in the first place, in the ability of withdrawing the mind from corporeal things, and in considering them only as means instrumental and subservient to spiritual things; precisely as the universal body is only an organ or instrument of the soul, so the animal mind should be the instrument of the spiritual mind.
- (ii.) Liberty, in the second place, consists in this, That the mind can be instructed both by the Sacred Scripture and by other writings, and also from one's own reflection, that there is a Spiritual and Divine principle which is superior, and thus acquire a certain intellectual faith; by which, when acquired, the mind can be kept in the thought of such things, and be fed and nourished by them. From this capability of thinking about spiritual things, when corporeal cupidities are removed the mind can be led into ideas which harmonize with spiritual loves; which loves, since they are perpetually present, flow in of themselves, and thus as it were vivify and induce changes of state in the intellect, until at length it is imbued with some sense and perception of spiritual things.
- (iii.) Liberty, in the third place, consists in this, That the mind can make use of prescribed means which are called sacred; that is, it can engage in public worship in the churches, observe the sacraments, adore God, and especially pray to Him [in private]. All these things are left to human minds, and they all constitute that liberty which is conceded to man; and when these sacred things are rightly employed divine grace is never wanting, but is always present to infuse faith and love, and by its providence so to govern man that he can become warm with spiritual love and zeal.

- (iv.) In the fourth place, a liberty now comes by which the mind can be delighted with spiritual things as often as it averts itself from corporeal things and submits itself to what is spiritual. For when the mind glows with spiritual zeal the intellect is then formed as it were anew, and should be called a spiritual intellect, which consists in changes of state which are most universal and most perfect, and which do not belong to the sensory but to the pure intellectory. In this case the animus with its affections yields; for the particular intellectories are parts and particulars which constitute the animus, of which if the inmost essence be purified, the common or general state will be held in obedience. But this state, so far verified, can never exist in the body. This is the genuine state of liberty; for in this state the mind relishes the supreme good, and chooses that which is best.
- (373.) In this manner the human mind is perfected; and it becomes most perfect when it is most adapted to the reception of superior loves. It is then purified and as it were formed anew, that is, it is renovated and regenerated, and rendered harmless and innocent, such as it is in infants, whose minds are not yet governed by any animus but by the pure mind. Therefore minds are to be introduced into that state in which they were prior to development and formation by the way of the senses. or a posteriori. For as the body [in old age] returns as it were into a state of infancy, so also ought the mind to do, and thus as it were to forget all those corporeal things which extinguish what is spiritual; that is, it should not be concerned about such things only so far as to be able to live prudently and perform one's duties as a member of civil society. Such minds, almost spiritual, even whilst they live in the body, have their feet as it were on the threshold of heaven and of its internal felicity; and for this purpose they long to be set free.
- (374.) From what has been said it appears of what nature the liberty of the first or most perfect man, or

Adam, was. He enjoyed a most perfect intellect, which was enkindled and animated solely by spiritual love, in whom the animal mind could not as vet rebel and combat against the soul [animae] and the spiritual mind. For his rational mind was not instructed by the way of the senses, nor was there any depraved society in existence which could irritate his mind, nor the knowledge of any evil which could infest it. His mind was supremely rational, and was entirely subject to his soul, and his soul to God: thus his mind was most free, because he knew what is supremely good, in experiencing it; for his mind was not adapted to any other loves. Thus his entire will was most free, because it was led to the best things. He could also be led to inferior or evil things, otherwise no liberty could be possible; which also experience has taught us. The ignorance of evil takes nothing away from such [state of] liberty; for it does not appear to have been the ignorance of evil but an aversion against it as being contrary to his nature; so that evil could be suggested or flow into his thought, but none could exist in his will. Thus the image of God, or the type of all spiritual loves, was manifest in his body. From him it is that we derive the propensity that as he desired to rise up against his God and to violate the laws of subordination, so does our animal mind perpetually endeavour to do the same, and to rise up in rebellion against the spiritual loves of the soul. Therefore he of all men is the most free who, knowing what evil is and capable of practicing it. still holds it in aversion.

(375.) That man who vehemently combats with himself and who bravely overcomes his corporeal desires is more free than he who never engages in any such combat; for the very use and exercise of liberty is to conquer oneself, nor can any man conquer when he has no enemy to combat. But these things we deduce from causes, or from the very nature of intellect, in which liberty resides. For he who is vehemently assaulted and impugned by cor-

poreal loves, that is, by temptations, may indeed admit them and harbour them in his mind; nevertheless, if he extinguishes them before they come out into act he restores the state of his sensory and of his intellectory: for the desires which oppose pure love, change, pervert, and torment the state of the rational mind, and at that moment spiritual loves recede or are suffocated; for these spiritual loves cannot agree with either state, because they require an entire and most perfect state, and they shun all imperfect states because they present nothing concordant and harmonious. But if these imperfect states are determined into act, they instantly contract a nature so that the [evil] state spontaneously returns and passes through its vicissitudes and alternations. For it is by use that we are accustomed to any form and to the changes of its state. Thus the tongue by usage learns its plications or foldings, and the same plication returns at the first rising of a similar idea. The muscle also conforms itself only by usage to the action; but a naked endeavour or conatus, however strong, does not teach the mode of motion. And thus it is in other things. Our intellect, or the changes of the state of the sensory and of the intellectory, are cultivated, and can be taught even to extreme old age. A naked effort or conatus can never induce a natural change in the state, but it is accustomed to relapse into its former state. As often also is that spiritual love of the soul inflamed as with a certain zeal and warmth, and it flows in the more powerfully, as though it acknowledged the intellect as its conqueror, and so it begins to love more exceedingly its rational mind. Thus the stronger the temptations are the greater is the joy of the soul and the greater the reward after the victory. From these things it appears that the works of charity, although there is no merit in them, are beneficially conducive to the state of mind, since they imbue it with the faculty of receiving spiritual loves.

(376.) Hitherto I have spoken concerning perfect souls,

in whom there are most perfect loves; but there are also souls whose loves are indeed spiritual, but contrary to divine love, that is, they love imperfections; from these also affections flow, but such as love a perverse state of mind whence contrary effects result; but concerning these souls we shall speak elsewhere.

(377.) Finally, the inquiry remains, Why should human minds be gifted with free will, since it is this very faculty which renders the human race most unhappy, and on account of which we are subject to infernal punishments? For from abuse of this faculty all crimes derive their origin; whereas [it is thought] that without such a faculty of free will we might all be saved. But to these inquiries we thus reply: It is evident that the supreme wisdom of God requires this free will in man, and that His providence is directed chiefly in guarding and promoting this faculty, and indeed to such a degree that He will not suffer the slightest thing to interfere with it: but He rather permits men to rush into the most abominable crimes than deprive them in the least of their free determination. This experience itself clearly shows; and nevertheless at the same time that punishment awaits every person who is wicked in his soul and mind, both in this life and in the future. It is also allowable for us to think concerning causes, since this also is conceded to our liberty of thinking, provided it be not repugnant to divine wisdom and to human reason to confirm what we think.

[FOUR CAUSES FOR THE EXISTENCE OF FREE WILL.]

- (i.) The first cause, then, why we are gifted with free will, appears to be this, That without the liberty of thinking, judging, and acting, there could be no understanding, no intellectual life, nor could our rational mind be conscious either of good or of evil.
- (ii.) That without liberty there could be neither virtue nor vice, and consequently nothing moral; since the ra-

tional mind is as it were a form, the essential determinations or determinating parts of which are either virtues or vices.

- (iii.) That without liberty nothing could be regarded as our own; consequently there could be no merit, nothing either praiseworthy or blameworthy, for necessity takes away the very nature of merit; thus there would be nothing on account of which we could be either rewarded or punished. Without free will there could be no favour or grace, not even from the Divine Being himself; nothing ought to be more free than the worship of God, or religion, and this is the reason why we are commanded to believe and to love God, which from ourselves we cannot do; nevertheless, there is something within us by which we can concur with these divine commands, and it is this concurrence alone which is required of us.
- (iv.) Without liberty there would be no human society; there could be no society of external minds [animorum], no society of rational minds [mentium] and of character; yea, there could be no association of bodies, and no diversity; all would be either entirely equal or entirely contrary to one another; nor could there be any mutual application of one to another; thus this our human world could not exist, for nature if all things were equal would entirely perish and be nothing, since it lives in diversity, and indeed in a diversity of such a character that from all the varieties thence resulting a certain harmony may exist.
- (v.) Without liberty there would be no enjoyments of life, for this in necessity altogether perishes; hence it is that liberty is the [essentially] human delight.
- (vi.) Without liberty there could be no diversity of souls, and consequently no heavenly society could exist, the form of whose government is celestial; in a word, without liberty the end of creation could not be obtained, which end consists in realizing a society of souls or a heaven.

(vii.) Wherefore it is perfectly consistent with the Divine wisdom and with the necessity hence resulting, on account of the wisest end which is foreseen and provided for, that our minds should be endowed with liberty, and that the Divine providence itself should perpetually watch over and govern, in guarding this liberty, and in directing it to its proper ends, that is, in distinguishing one thing from another, even as to the minutest particulars, in order that the most perfect form of a celestial society may be the result.

XIX.

WILL AND ITS LIBERTY AND THE INTELLECT IN RE-

(378.) It is most difficult for the psychologists to explain what the will is, to distinguish it rightly from the intellect, and to consider clearly its parts; for the will is not the intellect, since we are able to wish that which is contrary to the intellect, that is, contrary to the truth understood or to the better conscience; hence comes the art of dissimulating, which so prevails in the earth. We are also able to act from the intellect or from the conscience of truth; for the intellect itself searches for truths, but will is led to act as from a certain love, often without knowing whether it be a good love or not; whence comes the saying, "I know the better and desire the worse."

(379.) But that we may know what the intellect is we must return to those things that are below the will of which we have a knowledge, that by comparison and a mode of correspondence we may perceive what it is. Below the rational mind [mens] is the lower mind [animus], and below the intellect the fivefold sensation or the universal sensation which is called the perception. Affections are attributed to the animus, as are also cupidities. Likewise loves are attributed to the mind [mens], as also wishes; so that the cupidity of the animus corresponds to the will in the rational mind. The ardour of cupidity in the animus is called desire in the mind [mens], which is joined with the will itself. When we thus truly perceive what relation the perception holds to the animus, and also

perceive the relation of the intellect to the rational mind, then also, understanding the relation of the cupidities to the affections, and of these to the mind [mens], we see the relation of the wishes [voluntates] to the loves, and of these to the rational mind.

- (380.) Now every affection has as it were its animus and particular genius, and likewise every love its own particular mind, so that its own mind is said to be in it, and as thus there are as many affections or special animi as desires of the animus, so there are as many loves or special minds as there are wills of the mind. This parallelism occurs in other similar things, so that by mere change of terms those things are suggested which are proper to the mind.
- (381.) From these [parallelisms] flow forth as it were the synonyms, will, mind, intention, inclination; as when one says, "This is your mind, your will, your intention," and so on. But no one says, This is your intellect, unless in those things which are directly subject to the operations of the intellect.
- (382.) That we may perceive what the will is we ought to first separate it from the intellect, or consider the intellect abstractly from the will. Intellect viewed in itself has for its object truth, and the very essence of truth, its nature, quality; nay, even the connection of truths among themselves, as well as truths in goods, as in harmonies, in affections of the animus, in the loves of the rational mind; in a word, it extends to all things in the universe whose nature it desires to explore. It is concerned first in finding out causes from effects or effects from causes, which is called the science of Dialectics and also Topics. The method itself a priori or from principles is called Synthetics, and that a posteriori, Analytics. The method itself of exploring causes is indeed Analytics. It is similar to the method by which the intellect is produced. When the intellect is perfected then it is possible to proceed by the synthetic way, that is, from principles.

which are so many truths; but truly the synthetic way in itself is of the mind, especially of the pure mind. It is then the method of the soul and of the angels, who laugh at our intellect, for they have their knowledge from themselves, without science or demonstration. The intellect itself is beneath the mind by nature, but the rational mind ought to be beneath the intellect. Another part of the intellect is Rational Logic, namely, to draw conclusions from antecedents and consequents.

(383.) But the mind viewed apart from the intellect is not rational, but it is all natural, and is ruled by its own desire and from itself; for it is love, which is an operation of the soul and spiritual, which controls the mind. Loves are either those of the animus or the pure mind; these govern the rational mind, which possesses no love of its own or from itself. The mind always has an end, which may even be its principle, and which may be in its means, and may rule everywhere, so that in a whole series of means there shall be the same end. This end is viewed in the mind, and indeed as present, whether it be in things past or to come; but the mind naturally bears with it all the means which lead to that end, for nature is so formed that it may serve the mind as means while its ends are in progress. It is natural that means should be separated by time and space, but not the end, which is the same; and because the end is the same in the beginning, in the mediates and the last, it follows that love is the end. This is desired and is promoted by the effects, so that we may perceive in the mind the same love, its complement, and ultimate end which was in the beginning; whence springs the pleasure of the body, when [this love] descends into the body. It is also possible to ascend, and there are accordingly loves of the animus or loves of the soul which control our mind, and thus are regarded as ends. The intellect viewed in itself is not mindful of any end unless in its own mind, as for instance when it thinks, For what reason do I desire to know this? and it

observes that there is a latent cause which rules it, which is called the love of knowing truths, and which love terminates in some love of its mind. From this it appears that the intellect in itself is the instrumental cause of the superior mind, but it ought to be the principal cause in ruling the animus, its affections, etc.

(384.) Let us now consider what the rational mind is; for as it is rational it ought not be carried from one end or purpose to another, naturally or spontaneously, this being known as instinct; of which [instinctive] mind no will can be predicated, as willing or not willing, but merely an involuntary and unconscious being borne to the carrying out of its own destined ends. Thus the rational mind, which is as it were an internal sight, ought to associate the intellect with itself, not only, for instance, to observe the truths of its own loves, or its ends contemplated as to their quality, but also to observe what are the means and in what order they are disposed so that the mind may pursue these ends. For this, knowledge is required a posteriori. When the mind associates with itself the intellect, it then is called rational and human.

(385.) The reason that the mind ought to associate the intellect with itself is because the mind is naturally borne to those ends which are purely animal or of the animus, that is, to corporeal and worldly pleasures; that it should therefore be turned from these and directed towards higher ends it is necessary that the mind adjoin the intellect to itself. The intellect ought to be the principal in controlling the cupidities of the animus, but instrumental in the loves and desires of the superior mind; for when the mind is inclined to the affections of the body then the intellect ought to be the most active, but when the mind inclines to spiritual loves the intellect will be passive, for these loves naturally dispose from themselves means to the end, since all things then flow in a provident order without the intellect, its occupation

being only in rejecting and moderating the affections of its own animus.

(386.) Thus the mind regards ends as present in future things, consequently even all intermediate ends as constituting one series or chain; for the last end or rather the last thing is not given in nature without a succession of means, nor can it be promoted without a nature in which it may as it were inhere, while the mind is intent on the effect. That the mind embraces in itself the mediate ends, while nature follows at will as an instrument. appears from the various wonderful instincts of brute animals; for the spider fabricates its own web most artificially, and fastening it under the roof-tile, he places himself in the middle of it, and seizes his food, winding it in by the threads. Bees crowd their cells, filling them with honey for the winter; they hatch eggs, are subject to their queen, send out colonies, kill the drones. Birds build their nests skillfully. All as it were from a most perfect intellect know all nature, science, and art, mathematics, pneumatics, and anatomy. We are governed by many spontaneous [activities], such being a whole natural economy, chemistry, physics, and mechanics. The mind commands every organ and its whole nature; and our intellect, after the examinations of so many centuries, is not able to discover how it acts; even the brain itself to-day lies hidden from our knowledge; thus while our rational mind is acting through the will, we are still so ignorant that we do not know what the will truly is and how it acts.

(387.) Thus the loves of the superior or pure mind do not need our intellect for attaining its ends, but the ends naturally follow the love of the mind, when the love is pure; the intellect is only able to effect this that the mind shall rest in the determining of those ends, which are the loves purely corporeal, since the loves of the body, if they are the instrumental causes of the superior mind, then flow in natural order. The intellect ought also to be interested in advancing superior ends actively, but so

long as society is otherwise, being carried away by so many different cupidities, it is enough that it should abstain from those things by which it is led astray. The rest belongs to Providence, which operates secretly through our mind, flowing into actions. All things from themselves and by Providence follow the purely good mind to its immortal felicity. All things from themselves and by Providence follow the purely evil mind to its infelicity; but pure evils are not given in the rational mind, for in that case it could be given over to its own body and the animus which the mind loves. But let us return to the will.

(388.) The will in general signifies mind, specifically some special mind or determined love; and because the mind comprehends in itself all mediate ends, also it perceives what opposes and what does not oppose the attainment of its ends. Wherefore the rational mind derives the means from its own intellect, and it disposes them in the natural order, also more methodically as the mind is more perfect and better. In this arrangement of means there are as many parts of the mind as there are of the intellects, namely, cogitation, judgment, and conclusion. The mind knows while it resolves and considers the means, and at the same time has in view the end to which it tends. It judges when it disposes the means into their true order, in which means it regards the ends which are to follow spontaneously. At length it concludes or wishes; this conclusion is called the will; for then all those things are in the will as in an equation which before were in the thought. Thus the will possesses all the essentials of action, as the effort all the essentials of motion. conclusion is different from the intellectual conclusion, in which there is no will, for the end is not that of acting, but of knowing what is true, and thus of instructing the mind what end it ought to love, what to wish, and what to avoid. Thus our intellect is able to propose ends, but God provides.

- (389.) Thus the mind with its thinking and judging of means is always present in the will, and it contemplates the action itself in the will as present; but because it also at the same time regards oppositions and resistances, partly from its own intellect, partly from itself naturally, the will is not able to be determined into action unless the resistances are removed; just as an effort which is always bent upon an evil, the moment obstacles are removed rushes forth to its indulgence.
- (390.) There are as many wills as there are ends; even the intermediate ends themselves are wills; thus action is a perpetual will, and rational action ceases when the will ceases; and such as the will is such is the action in man; but in brutes such as is the action such is the will, which is the same with the cupidity of their animus. This cupidity is controlled by a kind of mind purely natural, but not by a spiritual mind.
- (391.) The will always desires to expand its own internal sensories, as effort always desires to expand itself, just as in atmospheres compressed and held in equilibrium by surroundings, or even as if held in cords, but it is coerced by surrounding things or by so many intermediates in which it is involved, which resist. But in case they do not resist the will is immediately brought to open action. Thus will is joined to effort, and action to the motive, as the spiritual to its natural or the end to its effect. Wherefore it is not only a correspondence but a real copulation; and thus the will can be called rational effort, for life added to nature becomes that which is called animal.
- (392.) While the mind is in its own will, it is then limited and determined particularly or specifically, and is present in certain fibres of the body which pertain, namely, to the action which it has in view; consequently it is determined within in certain internal sensories or cortical glands to which the moving fibres correspond, especially the brain, from which it contemplates the action of the body as if present. But in those resistances

which are in and which as it were surround the will it contemplates delay, thus in time and space, or in that nature itself through which the end is to be obtained. Thus it is a faculty of the rational mind to regard as times and spaces these same delays, degrees, and movements of nature, or its celerities and distances. Thus celerity of time corresponds to [the idea of] time, and distance of place to [the idea of] space, as also succession to [the idea of] motion.

- (303.) That the will may proceed into action the equation it contains must be resolved particularly and by members; just so as when we wish to resolve a problem in algebra or its equation into its ratios, and analogies by numbers in arithmetic, or by figures in geometry.
- (304.) When the will thus breaks forth into act it is called the determination of the act, and thus a form similar to that in the will is determined in actions. The determination itself arises through the expansion and contraction of the cortical glands, through which the animal spirit is forced into the nervous fibres, and from these into the moving [powers] of the body, whence such an action exists as was in the will. Thus the mind can go through one fibre after another and one muscle after another with whatever celerity it desires, for the muscular system is so articulated and formed that it may correspond to each determination of the rational mind.
- (305.) The will also at once recurs with its accustomed spontaneity because the mind acquires its own mutations of state through use and culture, and thus it reverts spontaneously to a similar idea. For all things on the way have by the same use become so natural that like instrumental causes they serve their principal or chief-
- (306.) Since thus the will is the rational effort, and carries with it this nature of desiring to expand its sensories, but in a way determined into the form of an action, we next inquire how this is physically accomplished in the common sensory, or what is the mutation of state in

the sensory when the mind is in its own will. It is not like the mutation in the ideas of its own intellect, which are as many as the mutations of state. Very different is the case with the will and its love and desires; for in the determination of certain sensories which the will desires to expand, in order to produce its actions weaker or stronger a form of forces thence exists which is similar to a form of modes or of modifications consisting in mere attempts to expand its own glandules. Thus the will can exist and subsist both separately and together with the mutations of the intellect; and thus the physical cause of the will seems to be made intelligible.

(307.) But as concerns that liberty which is commonly ascribed to the will, this derives its origin from the fact that we say that we are able to will and not to will, to determine this to action and not to determine it, to wish against the better conscience or persuasion of the intellect, thus to simulate, to deceive, and to contrive wiles: but in this case the nearest cause of the action is taken for the remote, as is often done in various other things. This is the reason why the will is commonly accepted for the intention and for the mind itself; for while the mind thinks and judges concerning means it is able to vary some, to select others, to change its own mind, yea, even its ends; but all this through the aid of the intellect, which it is able to consult, so that the mind and the intellect are in this cogitation, for the most part conjoined, but afterwards they are parted according as the love and will, like a cupidity of the mind, carry it away. Thus the mind is able to introduce other means and other ends to its own will, as in a conclusion, even to change those that have been presented to it, to multiply, to divide, to withdraw them, even to the taking away of the whole will, and the substituting of a new one according as it foresees success. For this reason, when the mind associates itself with the intellect, then liberty can be predicated of it; as there is no liberty if

it is carried away by its loves. Liberty, therefore, is predicated of the will; for the mind is able to judge the whole progress of means—when, how, and how far these shall be determined into act.

- (398.) But indeed, if we look closer into this liberty, it does not seem to be separated from the liberty of the intellect or from the free will, but coupled with it; without the liberty of the intellect there would be no liberty of the mind; but the liberty of the mind consists solely in this, that it is able to obey and not to obey its own intellect.
- (399.) Meanwhile there is a universal will, which is composed of the particular wills which subsist beneath it. There is a common will, which is composed of other wills as its parts; this will is then called mind. There is a general will, a special and an individual will, so that the will may be divided into genera and species. There is a will subordinate to another, and a will co-ordinate with others, exactly as has before been predicated of the intellect. For there are as many intermediate ends, and as many wills, as there are means. In a word, all will has respect to an effect in which is an end, thence to a future event.
- (400.) No liberty and no will is left to the soul so long as it remains in the body, for it does not act from any previous deliberation, since all science and all intellect are connate with it, and it is itself science and pure intelligence; thus it has not to consult any intellect and associate itself with it, because it is by nature associated and most closely conjoined with it. Of its own nature it then flows into the sphere of the rational mind, and its operations are so many spiritual loves, which are kindled when the loves of the body and the world are removed, but under other circumstances become cold. The soul also is held to act according to the will of the rational mind, for the rational mind is not able to produce any

action from itself. This belongs to the soul as to the principal cause, and indeed necessarily, for unless the soul should thus condescend, the whole corporeal machine would go to pieces, and the sensories themselves would be broken up. But whether it be with its nature or against it, it must consent to action, and thus either love its mind or hate it. This is the reason why no one knows the state of his mind except God Himself.

XX.

DISCOURSE.

- (401.) Discourse, or the explanation of intellectual ideas though material ideas, which are just so many words, whence arise speech and conversation, does not result through influx but through correspondence, just as when hearing passes into the sight. Thus just so many mutations of the state of the sensory are formed, to each of which correspond certain forces or expansions of those corticals which command the very muscles of the tongue. This correspondence comes through use and culture, for whether an idea of the mind is to be pronounced in one way or in another, nevertheless the correspondence [between the idea and the word] remains.
- (402.) The action of the tongue, however, cannot be accomplished without the will, for will is the beginning of action, as the beginning of motion is effort. Wherefore the idea has to be carried from the thought into the will, and this is the joint operation as much of the intellect as the mind; thus the whole thought is as it were carried to the conclusion, which thus coincides with the will.
- (403.) But still it appears in discourse how distinct are the intellect and the mind, for speech or conversation are the intellect talking; through the connection of material ideas, or words, and their different dispositions, conjunctions, and the verbs, active, passive, simple and compound, qualities which are partly occult, a form is produced which can be understood by the rational mind, and thus be elevated from the sphere of inferior ideas

into that of higher ones, where the mind seizes upon and understands a certain inner sense which does not appear in its true meaning except through the connection itself just described. The *mind*, however, is present with its own loves, and excites the very conversation, and as it were vivifies not only the sound, but even supplies the more ardent words; especially does it break forth into gesture, into the expression of the face and the forms of action, which are images of the mind itself; thus from the speech itself it may generally be clearly seen what kind of an animus lies hidden within, however much it may simulate, for it is likely to be kindled by the thought and speech itself dwelling long upon one subject.

(404.) From discourse it appears of what nature is the communication of the intellect and the mind, and especially what is natural and what spontaneous to the mind and to the intellect. But this matter is extremely prolix.

These subjects have been but little thought out.

Human Prudence.

(405.) Human prudence, which is sometimes called the providence of the rational mind, consists chiefly in discovering and arranging means to a good end, so that the end may follow spontaneously as it were, after the example of nature, or that the disposition and ordering of the means may be as it were a natural one. Nor does it seem to take its rise from any previous intellect, since it presupposes [in itself] an intellect disciplined and more perfect, as also a mind which is in accord with such an intellect, nor does the end reveal the intention. The prudence is greater in the degree that the end is better; for what prudence allows it supposes to be good, or at least in the intellect it is true or truly good. That prudence may be of the highest character it is requisite that the best end be sought for, as the preservation of society or of one's country, of religion, of the Divine glory, and similar things; then when man proposes, God disposes, or Divine providence concurs with human providence. The mind in this case perceives no end except as intermediate, not even the last, unless in the last there is that which is First. He who arrives at this last in which is the First perceives all ends as intermediates. His prudence does not need to be active of itself, it is rather rendered active from a superior love, and the means are present as if of themselves.

(406.) Prudence is required as long as human minds are so very different, some inclining to evil, others to good; and without these various minds there would be no means for advancing an end. For every man is an instrumental cause and the means of some superior end; for even evil minds can be of use in attaining a good end, often a devil in forwarding the best end, as when Judas, inspired [by a devil] betrayed the Messiah. But this is done not by command but by consent, for infinite means are given to a single end, so that it is not necessary to seek such evil means but only to admit them by consent.

(407.) Human prudence extends itself to all actions in civil life, especially in evil society or among the wicked, both in protecting themselves as in furthering those things which look to the safety of society; but there is a civil as well as a moral prudence, even universal and particular, and there are its genera and species.

Simulation and Dissimulation.

(408.) Things whether true or false are to be simulated or dissimulated exactly according to the genius of the age, or according to human inclination or circumstances, all of which are motives of prudence. Malicious and cunning methods are employed when men's minds incline toward evil. Thus it is that simulation is a virtue and also a vice. Since the object is the attainment

of an end, and the means must be regarded according to the quality of the end, for deeds take their impress from the will. Therefore the noblest acts of charity, love, and benevolence are evil if they are assumed for the purpose of deceiving. So in all other things.

(409.) Simulation and dissimulation are always the external form of the mind, consequently of the body; the internal form which is hidden still remaining. Dissimulation is a crime if we feign virtues externally, or if we pretend to have a mind filled with a most perfect love, for the the purpose of attaining some very imperfect end or love; as, for instance, if when our mind was in the desire of revenge we should feign friendship, or when pitiless, compassion, or when impious, piety. The vice of simulation is always the greater as the loves which are represented are better ones. Such pretenders are the world's actors, and the real comedians of the theatre. Simulation and dissimulation become a virtue if we conceal our good ends while they flow as it were spontaneously through the means of prudence. Yea, even if we should feign evil things externally when among evil persons, so long nevertheless as this does not flow from the inmost sources of form, and through their own inclinations insinuate ourselves into their minds, still after becoming friends and brothers worthy of confidence the animus can yet be turned [to good].

But this art cannot be described in its innumerable features, since its methods are countless, and all unlike.

(410.) It is to be observed that there is no affection of the animus which does not show itself in the body, either in the face, the actions, by gesture, or by speech, and even in the very eyes. The art of simulation consists chiefly in this, that the countenance and external forms differ from the internal, and we assume an expression which fits the contrary affection; then also that we produce from the intellect reasons which are confirmatory, so that the expression may be believed to be genuine.

(411.) From these things it follows that to the intellect is given the power and the right of commanding the will of the mind, but not the mind itself. For the mind rules universally in the will, but the intellect favoring it admits and connects the means which tend to that end which the mind continually contemplates; so that there can be one change of the state of the ideas of the intellect and another of the will, and so separated may they be that one may remain after the other is changed; for a change of state is one thing and a concourse of expansion determined to certain sensories is another.

Cunning and Malice.

(412.) Cunning exists when the ends of evil are attained craftily under the appearance of good, as under a pretence of honesty, of virtue, of public safety, of religion, or by semblance of some kind of love for others, or through some deception by which we flatter the cupidities or wishes of another, and this knowingly and with intention. The cunning is the greater if the end itself, even though it be depraved, is veiled over by something similar in aspect, and appears to some minds as a thing to be approved. which is done by an intellectual colouring making the affair to appear comely. Sometimes this becomes the genius of an entire age, and it prevails among republics and kingdoms whose ministers are praised in the degree that they deceive others with more subtle arts while nevertheless a semblance of honesty remains. For cunning never regards any end as terminable or ultimate, but only as a means. It would be much too prolix to enumerate the various arts it practices. It prevails among minor societies, between individual associates, and a perfect friendship itself is often used as its guise. A friend is most liable to deceive himself in the degree that he is a lover of self. This is at this day termed prudence, while others term it sincerity or simplicity.

(413.) Malice however exists when no virtue is feigned, but when one does evil from nature itself, in the absence of all virtue and honesty, and pretends that it would be acting against nature if one did not act contrary to the better conscience. Thus such a one is touched by no shame for crime committed, and by no fear of punishment. The wicked man is one who knows at the same time that he hates truths and virtues. The cunning man does not hate virtues, but prefers his own depraved loves to virtue; and he gradually convinces himself that his vices are virtues, and he strengthens his conscience by carefully chosen arguments; since habit and all exercises of the brain lead on the animus and make the changes of the rational mind to seem like natural ones.

Sincerity.

(414.) Sincerity is the opposite of simulation and feigning, inasmuch as it speaks what it thinks. Sincerity may exist in both the good and the evil. There may be a praiseworthy sincerity even when the inclinations are evil, because it is a token of a truth misunderstood, or of a mind not intending to deceive. This sincerity is the friend of all. It grows out of the principle that feigning is a vice, or from a principle of honesty, or else from the habit of not changing the countenance. It is never admitted as a trusted friend in the company of the wicked.

Justice and Equity.

(415.) Our intellect not only arranges in order, thinks, and meditates, but it also judges and concludes, or in particular instances is governed by judgment and decision; but still the intellect is governed by the mind and its desires, which cause that desirable motives be insinuated more readily into the judgment than those which are distasteful. Since therefore there are as many judgments

because there are as many wills and desires as there are minds, it follows that the minds themselves are unable to act in the midst of so many decisions. In order, therefore, that there may be some one to judge more truly than others, there must be justice. Thus it must exist among many when they themselves disagree, and it must appertain to every thing which ever comes into our thought.

- (416.) Thus in all things where form, order, laws exist, in oneself and his mind, in larger and smaller societies, and in kingdoms, there are constant discussions, litigations and controversies, whence result civil and natural laws, jurisprudence, judges, kings, magistrates, and other institutions. Also in the sciences, all things are employed in disputing concerning what is good and truth, and each person is drawn into the opinion to which his mind and animus carry him; and if the mind were not ruled by the animus and its desires man would know from himself what is just and equal, and a perpetual harmony would rule. Ignorance, persuasion, and presumption pervert minds, as also do political artifices; but were there no self-love there would be no need of a code of justice.
- (417.) Since, therefore, there exists that which is true and good and just in itself, this is perfect in God, who is truth itself, goodness itself, and justice itself. The conscience also dictates justice. Lest therefore any one should act contrary to his better conscience, and do what is unjust, and so destroy the commonwealth and himself, he is subjected to a public punishment as to his body or possessions, or he is hindered by misfortunes permitted by Providence, or by the pangs of conscience, or fears in regard to his soul and eternity. All these things restrain the mind lest it should rush headlong into all manner of crimes; and for this reason there are punishments for the abolition and extirpation of evil.
- (418.) Equity truly corresponds to equilibrium in nature; when the natural equilibrium is disturbed, disordered motion takes place, and nature is as it were confounded,

and each thing awkwardly stirs up, acts upon, and destroys its neighbour. Hence by the more perfect and purer forces which are within they are reduced again to their equilibrium. So likewise in our body and in human society, when dissensions are adjusted we call it a state of equity, or as it were of equilibrium, each one rendering to another that which is his, and taking from another that which is not his, etc.

Knowledge; Intelligence; Wisdom.

(419.) We have a knowledge [scientia] of all those things which are in any manner insinuated into and held by the memory. These are usually insinuated immediately by way of the senses; especially is this so of things seen and heard. It also is acquired through teachers and through books containing all the sciences of things; also by one's own reflection and the discovery of some new truth or principle, which is termed the offspring of ingenuity; therefore he is a scientific man, a doctor, or one of the learned, who is acquainted with many sciences, experiments, and histories, and can rehearse all these. He is believed to be intelligent: but these two things do not always go together. A very little child can be among the most knowing, because it can repeat whole books by memory, when nevertheless it does not follow that it is intelligent. Knowledge has to be acquired by mankind; with beasts it is connate, but is not reproduced in like manner. Not only can material things be retained in the memory but also things purely intellectual, as of philosophy and the deductions [of logic], many of which can be reduced into one, and so forth; and thus the memory can be filled with all things.

(420.) Intelligence is the being able to reduce the things of memory into perfect order and into perfect forms, thence to draw forth truths, to scrutinize hidden things, and to conclude as to present things from the past, that

is, to be a philosopher as it were from birth. There are many parts of philosophy and physics into which one penetrates from the things of the memory from his own intellect. As he has penetrated and from himself through reflection possesses many truths in his memory he is intelligent; for the pure intellectory and a certain superior natural principle concur in the intellect, so that this may instruct the very ideas of the memory to rightly consociate, that is, to co-ordinate and subordinate themselves into their proper forms; and in this principle there is present of itself all science universally. Without this there would be no intellect, that is, without a natural logic, dialectics, topics, grammar, mechanics, acoustics, optics, etc. For with everyone there is inborn a certain natural law; only the particular ideas are wanting which this law may reduce to order. The more apt one is in making these deductions from himself (for the difference in this regard is immense), in that degree is he the more intelligent. There are very many persons who only feign intelligence, in that they pass off, for their own, numerous intellectual things which they have acquired from doctrine, and also the conceptions and discoveries of others. There are also those who cannot become intelligent owing to their want of a knowledge of things, or their ignorance; for these wander as it were in darkness, but still they exhibit a gift of ingenuity in those things which they do know. The intellect always increases with age, and is called judgment, or the possession of a mature judgment; a great many differences occur in its development, for a man can be intelligent in one line of study and not in another. It is rarely that a man is intelligent in all things; however, it may be only application that is wanting.

Wisdom.

(421.) He is wise who in all things has regard to an end, chooses the best, enjoys properly his own liberty, embracing those things which ought to embraced, and shunning those which ought to be shunned. The wise man is always honest, or a lover of all that is virtuous. He considers himself as a part of the whole, he imposes obligations on himself from a sense of duty, he subjugates the animus and suffers the pure mind to act. The wise man loves corporeal and worldly things for the sake of uses as means; in other respects and in their abuse he despises them. The wise man loves intelligence as a means, but otherwise or if it leads the mind into error he hates it. Intelligence and wisdom are rarely conjoined so long as intelligence is very imperfect and erroneous, excusing the follies of the insane mind, and justifying an obedience to bodily desires, for this takes away wisdom. The wisest of men is he who loves his neighbour as himself, society as many selves, and God more than himself, and according to this directs his actions, which are regarded as means. So far as he departs from this rule so far does he depart from wisdom. The wise man is known not from his speech but from the direction of his life. A rustic can be wiser than the greatest philosopher, for wisdom is divine, while intelligence called philosophy is human, and it frequently happens that the one recedes and diminishes in the degree that the other advances and grows. It is the wise alone who are truly loved by sincere men and by God; to these does the Divine providence open a way of ascent. There are those who are wise by nature, like those who have a native sense of humour; some are wise from experience, and some from their intellect, if by the intellect wisdom has inspired intelligence, and intelligence in its turn wisdom. Wisdom is therefore a faculty of the mind, and not of the pure intellect.

Causes changing the state of the Intellect and the Rational Mind, or Perverting and Perfecting Causes.

- (422.) There are connate causes which derive their origin from the state of the soul itself, and also from its formation in the maternal womb. There are acquired causes, as from neglect of cultivation. There are causes originating in the animus, and some, finally, in the body. But the mind is variously affected respectively as to knowledge, intelligence, or wisdom.
- (423.) Connate causes are those which flow from the soul itself. This is because the soul of the progeny is derived from the soul of the parent, whose nature is transferred into the progeny. No wholly similar state of the soul is given to the state of another. The soul constructs its own organism after its own image; so also does it form the nature of the rational mind or its faculty, which is the reason why children are so much like their parent in animus, and why frequently the grandfather is reproduced in the grandson. The soul of every one is a spiritual form, and the loves of the mind itself are spiritual. But the difference [of persons] consists in this, that what one loves another hates. The soul of a divine nature loves the celestial society and God, but the soul of a diabolical nature hates the celestial society and God. Thus are the loves opposite in the soul itself, and as often as the spiritual mind flows into the sphere of the rational mind, it follows that contrary loves are insinuated; thus some are born for wisdom, and some for insanity; but this insanity does not prevent the mind from being highly intelligent, and becoming scientific, erudite, and learned, even to knowing better than others what wisdom is, while it is at the same time held in aversion. For all are born to intelligence, but not all to wisdom. Those who are born to wisdom are called the elect, or chosen ones.
- (424.) Causes connate through formation in the maternal womb.—The soul itself is from the parent, or [rather]

the inmost determination of that human form which afterwards is procreated or conceived in its own remarkable manner. For the soul is introduced immediately by the parent with its pure intellectory, in which similar substances are procreated in order, and the mother furnishes in the ovum every external form for the use of the soul, and supplies all that the liquors should contain; and because the maternal sensories communicate most closely with the embryo it follows that the child may assume a mixed genius of the mother and of the father, for while the soul of the father is in the offspring the animus is of both father and mother. From these things it follows that according to the accidental and natural mutations of the animus in the mother the organism itself of the internal sensory can undergo changes. Thus for example, the memory may be more apt for the reception of objects or for knowing them and then understanding them; for all the faculties depend upon the form itself, and its relation to those things adjoined, superior and inferior. Besides, the maternal nutriment, which the embryo imbibes, may be affected by a morbid constitution. Likewise accidents may occur in gestation itself, as compressions, contusions, and things of such a nature; or to the new-born infant through the carelessness of the midwife or nurse; also through the milk; or by various accidents, neglect or malice, it may be brought about that the rational mind cannot be perfectly developed, or that it inherits some natural imperfection. But whatsoever evil it thus derives is external, and not an internal vice of the soul itself, which is thus rendered incapable of operating into its own proximate organs and through these into the more remote.

(425.) Among acquired causes the chief one is that the mind is not improved, or that it is not rightly cultivated, thus when it is not cultivated by knowledges, or when its cultivation is not in the natural order, those things being forced upon it to which it does not naturally incline,

or out of their proper succession; also when the mind is not excited by a love of perfecting itself; for the love or ambition to excel others in knowledge, intelligence, and wisdom especially contributes to the perfection of the mind, and in very many this ambition can be aroused. But when the mind is not cultivated it remains in the state of its own ignorance, since without ideas of the memory and imagination the rational mind will in vain endeavour to develop its own nature and produce its proper faculty. For the mind is like an artisan who does not know how to work without instruments; and the intellect is the principal cause, and the memory and thence the imagination is the instrumental cause. Thus in the most illiterate peasant whose mind is instructed in no science there may be a greater than the prince of philosophers; for thus the greatest endowments and the loftiest genius frequently lie buried in the most obscure minds, and often are by a singular providence brought into light. In the mean time they appear as dry sponges, as dregs, and a sterile field overgrown with thorns.

(426.) There are causes originating in the animus.—It is evident that the animus, either naturally or by habits, or by some cause, as by misfortune, too excessive joys, or by bodily disorders, can become diseased and desire things not desirable, overshadowing the intellect of its own mind. being unwilling to admit anything which does not flatter this special animus, and rejecting not only intelligence itself, but also wisdom, and holding them in hatred. They believe in everything which agrees with this love. In a word, inasmuch as the animus wishes to rule over the pure mind in our rational mind so far it prevents the mind from becoming perfect, since these loves are what distract and disturb the mind and make it sick; neither do they only disturb it, but they obscure it with a kind of ignorance, just as do pride and haughtiness, avarice, and other base loves. Hence comes a contempt of the sciences of intelligence and of wisdom. The animus also infects the animal and sanguinary spirits and diffuses widely its own poison; for the animus immediately flows into the form of the body, and thence corporeal causes are aroused, which combined operations destroy the life of the mind.

(427.) Corporeal causes are many; as the various diseases which affect the humours, especially the red and the purer blood, or animal spirit. These diseases are innumerable, for many diseases pollute the blood. things causing disease will therefore cause destruction of the mind, thus bad nutriment, poisons, drink, and every kind of intemperance, since the vitiated blood draws the animus apart and consequently the mind; for the animus naturally depends upon its own intellections and the form of the common intellectory, but externally it also depends upon the state of the purer blood or the animal spirit, which if diseased drives the mind to insanity, even to delirium, but on the blood being restored to health the mind returns to its normal state. From which it follows that these changes of state are external and not internal. How this happens can be demonstrated, for through the sensories or cortical glands, as from the arterial vessels into the fibres, there flows continually the blood-spirit. Such is the quality of the blood-spirit [spiritus sanguinarius] that if it is too warm, too cold, too thin, too sluggish, too watery, or mixed with heterogeneous or homogeneous particles, it will remain in this cavity of the gland, either not flowing in or not flowing out. Then the sensory is unable to pass through its change of state, and hence it can produce nothing from its memory, it can neither imagine nor think. Besides, it can be excited internally as well as externally into absurd and irregular motions by heterogeneous causes, whence come deliriums. Similar things take place in burning fevers, in apoplexy, epileptic fits, paralytic strokes, in catalepsy, tarantismus, loss of memory in catarrhal disorders, and other troubles. These are the ordinary bodily causes. There are also extraordinary causes which injure the cerebrum itself and thus the common sensory or the external form of the sensory, as inflicted wounds, water on the brain, inward tumours, and innumerable like things, some of which can be cured and others not. That the reasoning power of the mind, or the human intellect, and likewise the affections undergo at the same time noticeable changes, is confirmed by daily experience.

(428.) From these causes which diminish or destroy the executive faculty of the mind it can be judged what are the causes which perfect the same faculty, for from an examination of particulars a knowledge of contraries flows. In the meantime, this care is most incumbent upon us, that there should be a sound mind in a sound body, or that the body and the animus should only be so indulged that the mind shall always remain sane.

XXI.

THE SPIRITUAL LOVES, OR THE LOVES OF THE SOUL.

- (429.) That we may know of what kind are the affections and loves of the rational mind it is necessary that we consider not only the affections of the animus, concerning which we have just now treated, but also the loves of the supereminent affections of the soul; these are called superior, the former inferior; the latter spiritual, and the former purely natural or corporeal. Because the rational mind does not possess any loves of its own, but is obliged to be ruled and drawn here and there, either by spiritual or superior loves of the soul or by the corporeal inferior loves of the animus, therefore it is necessary that we know what and of what nature are the loves of the soul, or rather of our spiritual mind, for thence flow the virtues and vices which are the essential determinations of the human mind.
- (430.) All loves of the soul, which may be called the eminent or spiritual affections, are universal, and they embrace in themselves in a most singular manner, in potency, all the affections in general which are able to exist specially and in a part. From a certain universal love as if from their own fountain head flow all special and particular loves like brooks. They cannot manifest themselves in any place except in the animus and the mind, in which they are determined into certain genera or certain species, all of which look to a certain universal love in the soul, from which when they descend as streams they are on the way liable to be defiled by imperfections which are adjoined to nature, and so they scarcely know

that they are derived from so pure a fount. The animus derives its power of desiring or of loving from its own soul; but the power of loving in one manner and not in another it derives from its form, as also from its connection with the soul by means of the rational mind. Therefore the effort of almost all science is to be able to subordinate particular under special loves, and these under general ones, or to arrange them into their own classes, and to perceive in what manner they flow from universal or spiritual loves: this is the true psychological and pneumatic science.

(431.) All souls are purely spiritual forms, thus all their minds and loves are purely spiritual, whether they are good or evil; for the spirit, whether it be good or evil, is nevertheless purely a spirit, or purely a mind, and it has loves purely spiritual, that is, universal, in which are contained the principles of the inferior and purely natural loves. The good angel and the evil angel or devil is purely a spirit, and the loves of both are purely spiritual, with this difference, that what the good spirit purely loves is contrary to what an evil spirit loves, or is what he is said to hate; for there exist pure love and pure hate, which are a pure love of contraries. Thus there are spiritual loves good and evil, but they are all universal, superior, and belong to the soul, and are most perfectly good or evil. But because good and evil, as truth and falsity, are opposites, and in one subject there may exist a mixture of good and evil, and truth and falsity, owing to that mixture, in accordance with the received habit of speaking, that which is not purely good is called impure, or that which is purely evil very impure; so love is pre-eminently known as the love of good, although there is a love of evil which from its own nature is conjoined with the hatred of good. But lest we may produce confusion of ideas in the following parts, we propose to use the expression the mind and the purely spiritual love, but not the pure mind or the pure spiritual love; for on account of acquired ideas we are scarcely able to discern that that is impure which is not purely good or purely true. Strictly speaking, all that is impure which is mixed with imperfections below itself, so that the human rational mind is never pure.

The love of a Being above Oneself.

- (432.) The first and supreme spiritual love or love of the soul, and the most universal, is the love of a Being above oneself, from which it has derived its essence, and perpetually does derive it, in which, through which, and on account of which Being, it is and lives. This love is the first of all, because nothing can exist and subsist from itself except God, who exists in himself, and alone Is Who Is. Because the soul feels this in itself that supreme love is innate in it, and thus the very divine love is in us.
- (433.) There exists a purely contrary love, yet it is spiritual and supreme, or a pure hatred of Divine power or of a being above self; this love is called diabolic. From this we may recognize of what quality good love is, and from the good of what quality the evil is, for there exist infinitely different mediate loves. This love is called the love of evil, the evil mind itself, such as is the mind of certain souls; for the soul of no one is absolutely similar to that of another, nor ought it to be similar, that there may be a society of souls, and the most perfect form of a society. The evil spirit or the diabolic mind even feels in itself that there is a Being above itself, from which it has derived its own essence; that that Being is to be loved above self, and the love to be testified by adoration. But although it recognizes, nevertheless it disdains and envies it, and rebels against its own consciousness, and hates the very truth that it is so; and thus it loves self above that Being, whence there is a perpetual incurable hatred, such that he would wish to destroy himself a

thousand times if only at the same time he could destroy that superior Being both without himself and in himself, which cannot be destroyed. The conscience of such a mind is in anguish when it is doing nothing contrary to the better conscience, and it so acts because it hates the truth most deeply and from his very nature, and would perpetually love to destroy it. There are certain rational minds which seem to be images of this spiritual mind; may such not be the state of their soul?

The love of a Friend as Oneself.

- (434.) The love of a friend as oneself, or that there may be a love of another equal to that of oneself, is a spiritual love, for the soul or spiritual mind recognizes another soul and mind as an associate, and one of a society or divine kingdom; this flows from the nature of things, as well as from the first or most eminent of all loves.
- (435.) From nature: One or a part by itself is as if nothing unless it has relation to many things with which it is; thence exist a certain form of such things and the affections of form. There is no harmony unless it is of many united, and by virtue of the manner in which these are united among themselves; thus there is no felicity of souls unless of many together, no form and conjunction unless through love; and through love of another as oneself, whatever is in another is communicated to oneself and appropriated as one's own. Thence results a multiplied felicity of all, which is concentrated in each one.
- (436.) From Divine love: Whoever loves a friend as himself does not do so on account of the friend, but for the image of himself in that friend, and when the love is reciprocal, on account of the image of that one in himself, so that that one becomes a participant of that love and of the thence resulting felicity; and thus the harmony of all the friends who constitute the whole so-

ciety may transcribe its joy and happiness to one self, and from one self in whom the idea of the whole is concentrated, into each and thus into all. By this means a felicity beyond all power to describe, an inmost, even a Divine felicity, is excited. When that love is not towards self or society principally, but towards a Being above self. to whom one is united by love, one loves a friend through love towards Him with whom he desires to be united, and who resides inmostly [in both]. This supereminent or Divine love, which extends itself to the universal society of souls and pours out that very felicity from its own essence, can not help producing this as its first effect, that one loves that companion who like oneself also is loved by the Divine, so that they can not otherwise be united than by a conjoined love towards Him who loves both with His own love. Wherefore that very conjunction resulting from love singularly descends from a common love of a superior, which is the common universal and hence the particular bond of all. Spiritual love towards a companion extends itself so far that it does not hate the devil but the evil which is in him, and if he would be curable he would love him, but as it is he only pities him. Therefore the most universal spiritual love is the love of a Being above oneself; from this descends the love towards a friend, for the particular loves of friends are collected from a supreme love, and from this they subsist. These particular loves of particulars taken together constitute that universal love which is divine.

(437.) There is a contrary love, spiritual as well as natural, or a pure hatred of others and love of oneself alone. This love is diabolical, and it follows naturally from the hatred towards a superior or God. Whatever joins the minds of friends this disjoins, for those impelled by it seek to cast down that superior beneath themselves, and they cast Him down in themselves, consequently all those who are His and are in Him whom they judge inferior to themselves. It declares itself rather their God;

regarding itself as the universal or as omnipotent, or of such a quality in itself as God is, consequently all things which subsist from God as subject to itself. Wherefore these do not love their companions unless they consent to and are in the same spirit, but this is not from love, but from a likeness of will to accomplish an end. But because there is no universal or superior hatred by which the minds of those who hate may be conjoined there is no regulated society, but one is armed against the other. for they have their very essences in hatred, and all that they love is vice. Thus in this same hatred remain their soul and life, and one rushes to the destruction of another and tortures another. These results follow as simple consequences. From these statements it is manifest of what kind the intermediate love is, for there are infinite differences between the pure love and the pure hatred of those who are associated.

To love Society as many Selves.

(438.) The love of many, of society, of country, of the human race, is not above that of self in the ratio in which is love towards God, but it is greater than that of self in an arithmetical or geometrical ratio or proportion; it becomes so by simple addition or multiplication; in an arithmetical ratio if love increases according to number, in a geometrical one if according to number and the greater and smaller societies, while at the same time their sums increase. But love is elevated above self, as an inferior power is to a higher power; for example, as a root is related to its fourth power or cube; so that while the iove itself may be almost as nothing, respectively, still it becomes something according to the number of those who are loved and who are able to love. Therefore love of the neighbour as oneself supposes a multiplication of love respectively, in the degree that the society is numerous. Nevertheless the increase of love is wholly from the same

cause, for in the degree that it is more universal there is reciprocally a greater sensation of love in oneself, and of felicity thence resulting, since all its delights increase in the same degree. This love, however, being spiritual, does not concern terrestrial society, but the celestial society of souls; it is not of the mind but of the soul, and thence it is pure, for the pure truth that it is such resides in it.

(439.) The contrary love or pure hatred increases in a similar ratio towards its many objects, thus it takes place in an analogous arithmetical or geometrical ratio; indeed as opposed to the Divine will in a double and triplicate ratio. It is not therefore necessary to describe this more fully. Such is diabolical hatred. It is not love of one's own society, but of evil alone, which never intimately associates minds, because there is nothing above which is a common bond; hence the one aims at the eternal destruction of the other, for each one numbers the other among those who are evil, and because the very truth they know convicts those, hence it affords a reason why they are not to be loved, and why they deserve punishment.

The love of being Near the One loved.

(440.) The love of being near to God who is loved is the most eminently spiritual love, for it is in the very nature of love itself. Hence when there is pure love there is nothing of the love of being above one's companions, that is, no love contrary to the love for a friend, with which love it either has nothing in common, at the same time that it does not reflect upon it, or if it does in any way reflect on that love lest it should seem like a desire of excelling one's friend, it places the lover of God in the deepest humility. But God himself is the One who exalts, and thus the love to be nearest to the beloved can exist without any desire of eminence; wherefore it pertains im-

mediately to the love of God, but not to the love of the neighbour as oneself. Then indeed the love of self wholly vanishes, and there arises a sort of contempt of self, on seeing oneself to be near to God and yet so infinitely distant from Him and to be almost nothing. Through Him alone has he any being, and the more in the degree that he is nearer to Him. When there exists this pure love, together with a love towards the neighbour, then there is an absence of jealousy if another is nearer to Him, and superior to himself; for then he loves the superior so much the more because he is nearer to God whom he himself loves. But indeed, if he does not look solely to love towards God, but regards also his own happiness, eminence, or love of self, then the love is not pure but mingled with jealousy. Envy ever presupposes something of love of self, of eminence among equals, and always reveals that it is so far distant from the love towards God.

(441.) The love of being remote from God, who is Love itself, is the effect of diabolical hatred itself, conjoined with the greatest jealousy if one witnesses the success of another's kingdom or society; thus one is stimulated by envy to prevent his neighbours enjoying success, and his hatred is rendered most intense. But indeed, when he sees his neighbour's success assured and is not able to further resist it, then this hatred is turned into the last degree of envy and fury, as much against self as against the neighbour. In this seems to consist infernal torment.

The love of being Eminent in Happiness, in Power, and in Wisdom.

(442.) The love of eminence in happiness is never a divine love, although it be spiritual, for in so far as a person loves his own happiness instead of the happiness of others, so far he loves himself more than others, and thus so far he removes himself from those two fundament-

al loves of the first [source of love] and becomes more unhappy. To love God and the neighbour for the sake of one's own happiness is for one's own sake, thus it is not pure love; but to love God for his own sake, because He is Love itself, and to love the neighbour for God's sake because this is His love, and because any other love is the love of self, is pure love. But to love chiefly on account of the effect of love is contrary to order itself, for happiness flows of itself as an effect from these two loves; and pure love does not look to effect but to Love itself, abstractly from effect.

- (443.) The love of surpassing others in power is similiar to the love of excelling in happiness, for one involves the other, as we always suppose there is happiness in power. This love of eminence discloses a love of self instead of others, such as the love of ruling always is, thus it is still less divine, although it be spiritual.
- (444.) The love of being eminent in wisdom is similar. To strive after wisdom is a virtue, but to do so for the sake of being eminent through wisdom is a vice; for wisdom itself, like happiness and power, is a necessary consequent of the love of God above self. So that to love happiness, power, and wisdom chiefly is to prefer them to God, or to love God less than self, or equally with self. This indeed is not a diabolical love, for the devil does not love or desire to love and adore God for any end which is the necessary consequent of love, but he entirely hates Him. Wherefore this seems to be the love of human souls after the fall of Adam, thus it is in our souls, and indicates their perverse state; yet we ought, nevertheless, to recover that pristine state, and both by prayer and the grace of God we are even able to strive for this end with our own powers.
- (445.) The love of eminence conjoined with hatred towards God and the neighbour is diabolical, nor can it exist without the love of self above others, or splurious ambition, avarice, inhumanity, and many other vices or

crimes. It especially manifests itself in the love of power over others; the desire to be able to be over others is the desire to be more than man, thus to be equal to God. It loves these means as an end, for instance, honour, riches, possessions, which affections go on increasing and never terminate, for they aspire to the infinite, and believe themselves at the last to have reached something infinite, although it will be as far distant as the finite from the infinite, should they have become possessed of the universe itself. The happiness to which such a one aspires is supposed to be in power itself and to be reflected by it upon him, but because [his love] comes from a source contrary to felicity, he becomes the more unhappy.

(446.) This love is contrary to wisdom, because it is contrary to God, who is love and wisdom, therefore it is hatred of wisdom and also hatred of the true intelligence which dictates wisdom, of which nature is the love of those in the desire of ruling. These do not love wisdom on account of wisdom, but that by this means they may better rule over human minds, which power they esteem as wisdom. Except for this they would desire all wisdom to be extinguished, and wish that the dark ages might return.

The love of Propagating the Celestial Society by natural means.

(447.) The love of propagating celestial society is spiritual; for example, the love of multiplying the members of society. This love is greater than the love of self, because it is on a plane with the love toward society, since the soul knows that that society cannot be propagated unless by natural means, for instance by generation, therefore of itself it burns in this desire, which is the reason why venereal love is so vehement an affection of the animus. Spiritual love thus descends into nature, where the means are provided. But that this love, al-

though made corporeal, may indeed remain spiritual in the mind, it is a pure and commendable love when it regards heaven for an end, and the increase of its society. There is in this love a love of multiplying oneself, for it does not consider the offspring as separated or disjoined from self, but it considers self together with the offspring, as self multiplied.

(448.) But indeed, the contrary love or love of destroying the propagation of society cannot exist, not even in the Devil, for he loves his own society, and hates the divine; hence he eagerly desires the increase of members of his society that it may prevail. It is for this reason, I believe, that God gave so great power to the Devil, and united so great a society to him, that the love of propagation may not cease, even in diabolical souls. The love of destruction, or cruelty, reveals a hatred which is so supreme that it rebels against the love of self, thus that it desires to be cruel against self, and wishes for the destruction of the universe. Thus in the human race there can exist a hatred that surpasses diabolical hatred.

The love of one's own Body.

(449.) The love of one's body is not to be confounded with the love of self. Every one loves his body because it is in connection with the soul, for the sake of propagation and multiplication in it of the soul, for [the soul] is continually conceived and multiplied. From this love flows the love of nourishing oneself, the sense of touch, also the love of protecting oneself from the surrounding vapours, whence is the sense of smell, also sight, and even pain when force and injury are inflicted upon the body. Without this love the ends and loves before-mentioned could not be obtained. Every one can love his body, and nevertheless love his neighbour as himself; for if he loves his neighbour as himself then he loves the body on account of the love of self, and at the same time on account

of the love towards society. While he does not therefore hate his body, still he is willing that it should be destroyed for the sake of society, rather than that society should perish, and finitely for God's sake would prefer this. Celestial society is one body, whose soul is God himself. Because one loves God and this celestial body he does not love himself and his own body otherwise than [as] a part of that society, or for the sake of his being a constitutive part.

(450.) Hatred of one's body cannot exist, unless in so far as it [the body] is not in connection with its soul, and does not obey when the mind commands; for this very love is a connection [of body and soul], but hatred is disjunction. So an artist does not love an instrument if it is not adapted to his use.

However, when we love anything more than self, whether the love be genuine or not, as love of glory, fame, envy, riches, venery, then we prefer that love to the love of our corporeal life, but still we do not hate the latter. We love the body in so far as it is a means of obtaining that which is loved, and in so far as it is that which through the mind feels love. Thus when death is risked for love it is not a hatred of life, but an indication that one desires that love may live. When, however, one is cut off from a hope of superior love, then he falls into the hatred of living in the body, and there is a desperation and insanity of the mind, for without that love he thinks that to live is not to live, or but to live in misery; and thus he desires his own extinction. But such an insane love or hatred of self is never conjoined with genuine and truly spiritual love, such as the love of Deity, of friends, of propagating society; therefore it is as contrary to the essence of true love as it is to wisdom, these two being very closely joined.

The love of Immortality.

(451.) The love of immortality is a spiritual love, and coincides with the love of God and of society; for the spiritual life is to be nearer to God, who is Life itself and by whom all things live; but it is spiritual death to be remote from Him. Still that death is not extinction of essence, but is the extinction and privation of love to which true life belongs, just as blackness is not the extinction of light but is a suffocation which cannot exist without light. Hence it appears that the love of immortality is not that of living to eternity, but of living well and happily, for the soul knows that it is to be immortal, hence it does not love its own immortality except that were possible which is not possible, since all love presupposes a change and the possibility of a contrary, and otherwise it is no longer love. Therefore love perishes in those things which cannot be otherwise than they are. But the love of immortality appertains to those things which may be mortal or immortal, such as the exercise of love, charity, honour, virtue. These are all spiritually loved in order that they may be immortal in oneself, since the mind or the soul is the subject of these loves, and they may or may not exist in it. Since, moreover, these are the means of meriting the favour of the Supreme Love, the soul loves these as means and also as an end, not on account of self that it may be eminent among its associates, but for the love of Deity, and in order that there may be that in itself which it can communicate with its fellows to make the bond of love between them more close and binding. In this way it is better able to attach society to itself and itself to society.

(452.) There is also a hatred of immortality; but not that which is absolutely such so long as some hope of happiness remains; thus not in the Devil even, until after the last judgments, when all hope is gone, and the happiness of the blessed becomes manifestly the source of pain.

Thus there is a possible love of immortality in the vicious and criminal, inmostly resulting from the love of self, but the love of the immortality of vices arises when vices are esteemed as virtues or when there is something in vice which savours of virtue. Besides, all love of immortality perishes in vices, and brings with itself a doubt regarding all immortality, and at length a denial. These are the effects of impiety.

Spiritual Zeal.

- (453.) Zeal is the active and ardent principle in the above-mentioned loves, by which they are not only excited to loving but also to promoting the means for obtaining the end, and so some spiritual zeal is present in every love. For love in itself is not active except in the degree in which it is also passive, thus without zeal there is nothing in love proper to the subject in which the love resides. The zeal itself is the property of the spiritual soul, and it arises or is born and excited only by contraries. Thus without the actual existence of a contrary, or without the devil or contrary souls, there could be no zeal, but it would be a nonentity. Zeal is accordingly excited according to the degree of the assailing or the repugnant force, and it sets itself against its opponent as its enemy. Thus the stronger the diabolical society is, the greater is the zeal of the celestial society; and with the devil extinct this would also entirely subside. Thus there would be no kindling of minds, no anger of the animus, except from really exciting opponents. Zeal is in itself a love excited to a superior degree in order that it may equal the opposing force which it desires to extingiush.
- (454.) There is also a zeal in hatred, and indeed fierce and deadly, thus a rage and an impure burning fire. The anger therefore proceeds not from the zeal but from the hatred, and is turned into fury; but true zeal never degenerates into anger, but is a mild and gentle fire, inwardly

but not outwardly glowing. Thus it has been demonstrated both in spiritual and natural things that zeal or a righteous displeasure is able to extinguish the furies and tempestuous angers themselves, or that one good soul is able to put down thousands and myriads of bad souls and devils. For the Devil does not ignore the truth, but hates it; still because he knows that it is the truth which he hates he cannot help fearing the truth itself from a certain inmost essence, because it is stronger than himself. Thus one good angel is sufficient to cast down a thousand devils, for they fly at the first blow, as those who are tormented by an evil conscience. This fear is innate; while in others there is no fear but only the zeal which belongs to bravery.

The love of Propagating the Kingdom and City of God.

(455.) This is a spiritual love, and flows immediately from the love of God and of society, but is excited and grows in zeal according to the degree of the opposition met. The kingdom of God is the celestial society of souls itself, the city of God being the terrestrial, which is the seminary of the celestial. This love of propagating the city of God or the Church is the mind and spirit of our religion, and all the means of propagating this religion are subject to this love.

(456.) But the love of destroying the Church is diabolical, and its kingdom is on this earth. It is the contrary of true religion. This subject would be too comprehensive for discussion here.

The derivation of Corporeal from Spiritual Loves, and their concentration in the Rational Mind.

(457.) From comparing loves together, the spiritual and the corporeal for instance, it becomes evident enough that spiritual loves are the fountains of all corporeal loves;

consequently that no corporeal love can exist unless a spiritual love pre-exists; and that the spiritual cannot exist unless there be actually a heaven or society of blessed souls and a hell or society of infernal souls, for the one presupposes the other; as, if you should deny the source you would also deny the derivatives, and at length you would have to deny the existence of every affection of the body or the animus, for nothing can exist from itself, it must flow from some principle to which it universally belongs.

(458.) Now since the spiritual loves are the sources of the loves of the body or of the animus, so the particular loves of the body can be deduced like so many special determinations of a certain spiritual love. For there is an infinite variety of affections of the animus, but all may be subordinated and arranged in order, so that one may know from what source they flow. But this subordination cannot be unfolded and described except in many pages.

(459.) But it may happen that there is a good spiritual love in the soul, and a bad one in the rational mind or in the body. Indeed man himself is naturally good, and by use and habit becomes bad. Therefore as the mind is not such as is the soul, and still less the body, therefore it belongs to God alone to judge concerning the soul and its love. For all the loves, both of the soul and of the animus, are concentrated in the rational mind. which thus is carried along, not only according to its own natural inclinations but also according to principles acquired or intellectually learned. Likewise also is it drawn asunder by the authority of others, by use, and by the natural seductions of the pleasures of the body, and so another nature is induced upon it. The most universal source [of the bodily and spiritual loves] is the love of Deity above, and thence the love of the fellow-man as of oneself.

Pure or Divine Love viewed in itself.

(460.) God is the very spiritual Esse in all things, and so far as the spiritual Esse itself is in corporeal things God is that very Esse in those things, so that in Him we live, move, and have our being. Now so far as God is the Esse itself in all things, He is the Love itself which cannot but belong to that Esse which is from itself and vet distinct from itself. For if God essentially recedes from a created spirit it is no spirit, since that it exists is not a property of spirit but of Him by whom it is created, in order that it may be. As we say from analogy, the body is not the soul but the soul is the very esse of the body, so that if the soul departs the body is no longer a body, but falls to decay. Whatever thus belongs to another, as a primitive to its derivative, must have an unbroken connection with it as to existence and subsistence; and if there is connection there is love, which here coincides entirely with the connection. For love causes that one's own image may be seen in another, but according to the degree of derivation, and ther fore imperfectly. Love may therefore be said to belong to him in whom there is an image of another, not that he loves himself but that he loves in another that which he wishes to belong to himself or to be conjoined to himself, so that, in other words, the love may be mutual.

(461.) Hence it appears that God is love itself, and that we are in so far divine as we mutually love God, and thus by love draw near to Him. And because God is life itself and wisdom, it follows that we so far live and are wise as we draw near to God; hence love is the very bond itself, the life, and the wisdom. By love and this connection all those things are in us more perfectly; and so far as we remove from it so far are these in us imperfectly, and indeed so imperfectly that they can hardly be said to be in us. Therefore the most absolute and universal source of all loves is the love of Deity toward us,

and our mutual love to the God above us, which must be a love capable of being infinite, while our love of ourselves ought to be considered, when compared with that supereminent love, as the finite compared with the infinite. This infinite love is not possible, it is true, in our souls which are finite, but by the mercy of the love of God toward us it is possible that our love may be exalted even to an indefinite degree.

XXII.

THE INFLUX OF THE ANIMUS AND ITS AFFECTION.
INTO THE BODY, AND OF THE BODY INTO THE
ANIMUS.

(462.) It is well known to every one that our animus so flows in into the form of our body that it finds its form as it were in it. We may judge from the countenance itself what is the general state of the animus, or what its inclination is, sometimes also as to what are the special states of the animus, or its affections; and when these affections exist they present themselves visibly, not only in the countenance but also in the eyes, in speech, in single gestures, and actions. Thus anger, vengeance, pride, hatred, love, and other affections are recognized by nature's speech alone; for what that form is which is superinduced upon the substantial form of the body we do not learn by any rules of art. Thus the animus, which is the general form whose affections are so many essential determinations, is actually inscribed upon us, and it is the countenance itself in its particulars which is varied according to our inclination to this rather than to that special desire or animus; also it writes itself there in time, as when a new inclination is acquired through use and habit. The animus also flows in into the blood and the animal spirit itself, and thus into the particular forms of the internal organs. For it renders the bloods precisely conformable to itself, since anger excites the bile and disturbs the particular humours: envy retains these in the blood, whence arises the bluish colour then apparent; pride expands the organs, and erects the nerves and muscles, and clarifies the blood, at the same time that it draws around it the clouds that it may be easily shaded. So with the other affections which flow into the particular organic substances of the body, and at the same time into the humours.

- (463.) It cannot, therefore, be denied but that the form of the formed body is the image of the animus, and that the animus in its first formation, even in the womb, is itself the form of its own soul; hence that the body, as to the expression both of the face and of the actions, is the image, type, and pattern of the soul or spiritual mind by means of the animus. For the mind first forms its animus, or it may be the soul its pure intellectory whose general mind is what is called the animus, and then flows in into the body before the body is able to flow in into its animus.
- (464.) How this takes place can also be demonstrated: but the demonstration itself demands an intimate knowledge of the internal organs of the sensories, a knowledge of forms in general and in particular, and of the influx of the spiritual mind into nature. For this is manifest, that nature is universally subject to a spiritual mind, as an instrumental cause to its principle, or as an instrument to the artificer, so that the whole world of nature, from a certain necessity, and thus spontaneously, assents to the rule of mind. Thus also the mind rules in the body formed, in order that the body and its muscles may exhibit every quality, as if not of its own power, but as of the mind as ruling. Since, accordingly, all the simple fibres and those thence composed spring from the intellectories and internal sensories of the brain, and there is nothing in the body which has to do with the form except the fibre which forms it, hence it must follow that all that affection of the intellectories and sensories of the brain is diffused by continuous fibres into the entire body; for there is a continuous connection of all from their origins and principles.
 - (465.) The animus is accordingly so inscribed upon

the form of its body, or is so related to that form, as an internal is to an external form. That the form is internal has been shown above. Every internal form has its proper external form, that is, its figure, which is the limit or common terminus of its essential determinations; and if it be natural for the internal to correspond to the external form it follows of necessity that the countenance shall indicate what the animus wills, for the countenance is the external form of the animus, and thus there are as many expressions as there are viscera and parts. It follows that the animus cannot help flowing in into its own body; but that it may dissemble and deceive is a faculty derived from the rational mind, which is able to command the animus itself; of which subject we shall treat further on.

(466.) On the other hand, experience also shows that the affections, changes, and diseases of the body are so likely to flow into the animus that in the course of time they will alter and transmute the state of its affections. For a fever, whether burning or otherwise, often excites the animus into unusual emotions, griefs, and passions, frequently rousing a mild nature to anger and rendering it morose. It is known from medical experience that gout and paralysis produce mental affections, so that from the changes of the animus are [conversely] constructed prognostic and diagnostic signs, phenomena, and symptoms. The gall-bladder, or the bile outside of the vessel, being excited by any cause, the lesser and the greater channels being obstructed, the animus will experience an ardour and burning, as also from injuries done to the head or brain. Indeed, diseases are often so cured by the ragings of the animus that these very excitements act as its medicines, the worst of criminals sometimes being restored to the path of virtue through the tortures of the body; and so in other cases. The animus is also changed by single senses, as by sight and smell, and transported into joy, loves, and other emotions. The reason is very evident

from the well known essence and origin of the mind. For the red blood about to be dissolved always passes over into fibres by means of the cortex, each cortical gland being an internal sensory, and each of these containing its intellectories, and from these intellectories taken all together, or their affections, arises the animus.

When the blood is infected by some disease, and the purer blood is at the same time affected, while flowing through these sensories, it [the infected blood] induces in them a change of state, so that the animus is unable to be affected according to a natural influx, for the correspondence itself is varied according to this induced state. As is a natural effect following from its causes and principles, and as is the blood naturally according to its animus, such it cannot be if the blood do not agree, but the blood being changed the effect must become altogether another one.

- (467.) But it may be asked whether the intellectory or the intellectories arising from such a change in the body are changed radically or interiorly, or only externally or superficially, so that after that change and purifying of the blood the animus remains still the same. This is indeed what experience teaches; for after the disease the animus usually returns the same as before, so that such a change is only superficial and does not alter the internal form. The examples are very rare of the animus being radically changed by corporeal causes. Drive out nature with a fork, it will yet come back again.
- (468.) But by diseases and similar causes only the external or general form of the animus can be changed, and not the internal, since only the state of the sensories is changed, perhaps because the internal sensories, unable to pass through these or those states, are compelled to assume others; for the animus cannot operate except according to the state assumed by the sensories, as the animus adapts to itself the states of the sensories. Hence that state arising from the internal form of the animus

abides notwithstanding these external effects, and returns when the outward change is passed, or after diseases.

(469.) But indeed, in order that the state of the animus or the intellectories be changed it is necessary that it be done through the rational mind; and even that by reason of diseases, misfortunes, and similar causes, the rational mind receives more healthy principles and thus expels those [changes of] state and puts on others which correspond to purer loves. Therefore the human animus can by no means be changed unless by means of the rational mind.

XXIII.

THE INFLUX OF THE RATIONAL MIND INTO THE ANIMUS, AND BY MEANS OF THE ANIMUS INTO THE BODY; AND THE INFLUX OF THE ANIMUS INTO THE RATIONAL MIND.

(470.) That the animus flows into the rational mind is clearly seen from experience; for our rational mind is possessed wholly as it were by affections of the animus. since we drive what the animus desires, and rush as it were blindly or without any understanding into its concupiscences. The cause appears evidently a priori, since the internal intellectories are what taken together constitute the animus, to whose internal form the external form must correspond. The external form is the brain or the common sensory; as, accordingly, the affection of the animus is, such is the state of the sensory, for the state of the sensory puts on that form which agrees with the affections of the mind. So long as this form remains, no thing else, however grateful or harmonious, can be insinuated into the mind unless it agree with this state. universal state includes and contains all special and individual states. The universal being formed, all the special states flow into it as harmonious. The intellectories are what form the change of state agreeably to the loves of the animus. Thus the animus flows into the state of the mind. The common animus is the agreement of all the intellectories according to that influx from the senses and from the blood; these form and move the common and external form to which the internal form corresponds.

(471.) When, therefore, the rational mind with the consent of the intellect remains in the state of the animus. which is that of all the intellectories, then it is blindly occupied by these flowing in; but when it dispels these and rejects the affections of the animus or holds them in check, then it is enabled to put on more perfect states. These changes may be brought upon the more rational mind through sicknesses, and in that case by influx and by correspondence; by influx, it may be, because diseases and diverse external accidents may so change the sensory that it can put on these states rather than those; but they are still states of the intellect; by correspondence, because the mind observes in misfortunes and sickness that the particular passions of the animus, such as vengeance, anger, envy, hatred, destroy the mind, and so it is imbued with piety and the virtues. Thus the mind itself by its own liberty changes the animus according to the occasion, by reflection and correspondence, and puts on a state agreeing with more perfect loves; and so can the animus or its internal form be changed.

(472.) But to change the animus is to change the nature itself, as to change a good animus to a bad one, which is easily done, or a bad to a good one, which is more difficult. This can only be done by means of the rational mind and its understanding, let that understanding be either really its own or one induced by faith or by authority. Nor is the nature changed [even then] unless we shun and abhor evils, and never bring our mind into that [evil] state, and unless as often as it falls into it we snatch it forth with the liberty given us, and put on that state which agrees with a more perfect love. Nor does this avail, indeed, unless we remain a long time in this state, and exert force and violence upon the other, and by frequent works and exercises of virtue put on the opposite, and so continue until the mind shall have drawn to itself a new nature, and expelled as it were the old, so that as often as the old returns we are aware that it must be

resisted. Thus and not otherwise can we put off the bad nature and put on the good, a most difficult attainment in this life without the Divine grace and aid; but in the same degree an end worthy of the greater mind if we apply ourselves; and what does not appear to be whole in us we shall thrice best obtain by prayers to God. So nature as it were bends and changes nature, not indeed by influx into the intellectories or substances of the mind, but by correspondence and reflection. For the intellectory knows truths, or what is true and what is false; and as it expels the hatred of truth, then the love of truth succeeds in its place.

XXIV.

INFLUX OF THE SPIRITUAL MIND OR OF THE SOUL INTO THE ANIMUS, AND OF THE ANIMUS INTO THE SPIRITUAL MIND.

(473.) The pure intellectory is that in which the animus at first resides, for it is in this as a pure natural mind. This, because it is of the intellectory, which is formed entirely from the substance of its own soul, must of necessity be also formed after the mind or spirit of its own soul, so that such as is the soul such shall be the animus in its very formation, even while lying concealed in the womb and during earliest infancy. For then indeed the animus is entirely subject to the spiritual mind; but afterwards when the rational mind is formed and the states of the intellectory begin to depend on this state of the sensories, then begins as it were an inversion, and the animus depends on an influx of objects and of harmonies through the external senses from the world and by the bloods from the body.

(474.) From these facts it follows that the spiritual mind flows into the animus, even to being its essence and life, for this cannot exist and subsist without the spiritual mind; wherefore also the spiritual mind always loves the animus; but when the animus rebels and wishes to render itself superior then it is rejected by the spiritual mind, and a perpetual battle arises, almost as if it were between God and the Devil. Each desires to occupy the rational mind, but the victory belongs to but one; nor can the animus be expelled suddenly, but there must be perseverance even to the end of life.

(475.) When, therefore, the bad animus has been changed into a good one, or a good into a bad one, thus as an acquired nature tries to expel the old nature, then is the former animus changed, and the animus being changed the state of the soul is thereupon changed; not by influx, however, but by correspondence, the rational mind acting as medium and the Divine grace concurring. There must be a disposition that the spiritual mind may be able to flow in with its loves, at least a reiection of the loves of the animus; so that the soul may be disposed to flow in with its spiritual loves, [or] at least that the mind may be disposed to the influx of those loves. The intellect here contributes nothing except it be from what is revealed; but faith springing from God, and His Divine power being implored. His spirit flows into the soul and changes its state or perfects it. But long exercise is needed, if the soul be bad, that it may become good; although not so long to restore a good soul by a change of mind. Thus there is a certain election of souls, for without a miraculous and particular favour a bad soul cannot at once be made good. But there must be a self-compulsion and most ardent prayer and continual zeal for that which is truly spiritual and divine. These appear to be the true principles for our attainment of spiritual perfection. For something spiritual and divine flows down from above into what is below, nor can what is without bring any change upon what is within except by correspondence, and such correspondence does not exist in the soul [except from the Divine gift].

The Influx of the Spiritual Loves of the Soul into the Rational Mind, and the reverse.

(476.) The spiritual mind, or what is of the soul, can never flow into the rational mind except through the animus or by its means, hence only while the animus is subject to the spiritual mind. Therefore in order that

the spiritual mind may flow in the animus must be subjugated, so that it obey and does not command. For the soul cannot flow into the internal sensory except by means of the intellectory. Hence we see how the spiritual can flow in; namely, when the affections of the animus are wholly submissive and are held in check so as not to occupy the mind, and when the mind suffers itself to be acted upon; and not even now unless the intellect knows from revelation what part is to be chosen or what is divine, the verily good, and just, and true. Then inasmuch as the mind does not understand this of itself, it ought to pray to God that He will inspire faith and love, for obtaining which many spiritual means are revealed. Thus at length the spiritual mind is able to flow into the rational mind. For so remote and deeply within dwells the spiritual mind that it is impossible to approach it immediately, or except by a universal means or by the animus. Hence it is evident how difficult it is to turn a bad soul into a good one, and that this is the work of Divine grace alone; only there must be the persevering human application.

XXV.

INCLINATIONS AND TEMPERAMENTS.

- (477.) There are innumerable human natures or inclinations, since no man is similarly inclined with another; but all these inclinations, which are infinite in variety, may be reduced to three general ones, namely, the inclination of being wise, or of honour or virtues; the inclination of knowing, which is an active principle and is natural; and the inclination of understanding, which may be called intellectual.
- (478.) The inclination of being wise, or the spiritual inclination to what is honourable or virtuous, is derived from the soul, and indicates a good soul or a spiritual mind, which is determined by true loves. But since the body is formed into an image of the operations of the soul, it follows that this inclination must be connate. The seeds of honour and the virtues seem to be connate, and prevail in whole families and their posterity. The virtues themselves are innumerable. One person inclines to this virtue in particular or to this virtuous quality, and another to that. The reason why the inclination exists is to be sought in the spiritual state itself of the soul, which state is derived by birth from the parents, whose soul the progeny inherits; to the parent, however, it has come by frequent exercise of virtues and the practice of piety lasting to the end of life. That posterity may obliterate the crimes of parents, and also on their parents' account may receive reward, is proved

in all the histories of the world beyond the possibility of doubt.

(479.) The inclination of knowing, or of learning the arts, is also inborn, since we are born poets, musicians, architects, sculptors, and into many other avocations, as experience proves; for this [aptitude] is derived from parents, and is perfected by use. Hence there must be industry in exploring the natures of particulars even in boyhood itself, and when any one is perfected in those things to which he inclines, he may climb to the highest round, for his desire aspires thither. This inclination derives its origin from the intellectory and its animus, for the first intellectory is infused by the parent and insinuated into the ovum, from which similar ones are procreated. This intellectory is more inclined to certain mutations of state than to others, hence also the sensories derive their proclivities to certain mutations of state. that is, to the forming and receiving of certain ideas which at once delight the animus, since they correspond to its mind.

(480.) The inclination of understanding.—Some are born to a prodigious memory, by which they can imitate an intellect; or into a facility of expressing the senses of their animus; into a presence of mind; to meditation or phantasy; some to judging profoundly even in regard to wisdom itself, although they are lacking in wisdom; some to certain sciences, as to mathematics, philosophy, history, and many other branches. This also is derived from the parent by the same cause, namely, that the senses are more inclined to putting on these mutations of state [than others]. But the inmost cause is found in the intellectory, in the mutability of its animus, and in the love and affection thence arising; for as it was in the parent such is it in the offspring.

(481.) But all these inclinations can be changed by age, both from external and especially from internal

causes, since our intellect is being formed and the rational mind coming into use. Hence many affections and loves can be insinuated and become habitual which are handed down to children by propagation. Nevertheless, the inclination of wisdom or the spiritual mind is longest to remain, because it is more remote from the rational mind, nor does it accordingly suffer itself to be changed. For God always inspires and provides its destinies, so that it shall not perish except it be in its posterity.

Temperaments.

(482.) There are four temperaments enumerated, namely, the sanguine, the choleric, the melancholy, and the phlegmatic; these are merely inclinations of the animus or the diverse animi into which we are born.

The sanguine temperament indicates a state in which the animus is conspicuously present in receiving sensations and producing ideas, prone to various affections alike, thus not tenacious of opinion, easily suited, lively; this animus beams forth in the face, eyes, speech, voice, gestures, and particular actions, and a description of it is furnished by the physiologists.

The choleric temperament indicates an animus not so prone to pleasures and various desires, but serious, sometimes indignant and morose if another does not favour one's opinion or one's love, but otherwise with the good man loving in general what is honourable. The face and outward form belonging to this temperament are also described [by these writers].

The melancholic temperament signifies a sad mind, immersed in phantasies, indulging more in internal than in external feelings, more averse to pleasures, rather an internal than an external man; unlike the sanguine temperament, tenacious of opinion, believing in hypotheses and opinions as truths, and thinking oneself wiser than

any; it is vehement in the affections into which it falls, and increases them by its own imagination; is a lover of solitude, or of those companions to whom it is accustomed, and hates variety.

The *phlegmatic temperament* indicates an animus prone neither to anger nor to other affections, silent, reticent, patient, but cherishing an inward ardour, slow in acting, and so on.

(483.) But these temperaments are not sufficient to express the changes of the animus, for they are assumed from the state itself of the blood and from the indications of the face, since the animus shapes the face to itself as an image, as it likewise disposes the liquids and the blood. in order that they may serve or favour itself. Therefore he who derives this or that nature from habit or from constitution [natura] has his blood disposed to this nature. But inasmuch as the temperaments express only the external form of the animus, from which some wish to deduce the internal, I am not therefore certain whether the inclinations of the animus can properly be reduced to these genera or species, and whether they exhaust the specific variations. This is clear, that as diviners they are very deceitful, and that they change with change of age. For the blood to which the temperaments belong is changed in various ways; as we call this one sanguine who enjoys a more flowing or delicate blood; choleric whose blood is sharper, more bilious, more flecked* and drier: melancholic if the blood is more hard and dry: and phlegmatic if it be more sluggish and tenacious.

(484.) The animus prone to receiving and giving forth affections, and consequently to external and internal sensations, is ready and quick, and is called sanguine. But the animus which is languid toward the internal and ex-

^{*} The editor of the Latin edition is doubtful as to the correctness of the reading of these adjectives, \(\int Tr. \)

ternal sensations and affections is phlegmatic. The animus vehement for its passions and internal and external sensations, is choleric. The animus slow toward the same is melancholic.

(485.) Thus we are able to draw distinctions in the animi rather than in the blood, and we may substitute them for temperaments, for it is the animi that are prone, vehement, and languid toward passions and affections, and hence also toward the internal and external sensations, inasmuch as the sensations follow the animus, as they cannot be separated from the animus. As is the animus such is the blood, and such the form of the body and its forces.

Part Fourth.

IMMORTALITY.

XXVI.

CONCERNING DEATH.

- (486.) We have shown above what the body is and what is its form, or that the body consists of forms inferior, by orderly and successive degrees, to the soul which is the spiritual form; thus the body consists of purer and grosser parts. The form of the soul is spiritual, that of the intellectory is celestial, that of the internal sensory is vortical, that of the external sensory or the brain is spiral, and that of the appendix itself which is properly called the body is circular. Its bones, cartilages, and similar parts are of the angular form, likewise the many elements which enter into the blood and constitute it, in every globule of which every form is concealed, from the first one to the last.
- (487.) These forms are so connected that one holds the other most closely, so that they appear like one entity, even though they be most distinct. Thus the soul is said to descend from its heaven into the world, when it brings itself into such forms, and shapes its organs out of itself and its own substance, whose forms at length are corporeal and material. The cause of this was that the soul might be able to engage in the functions of this lowest world, and operate in a manner conformable to its forces; since if it did not put on a corporeal form it would

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never be able to walk upon the earth, to lift weights, to cultivate the soil, to procreate offspring, and form a terrestrial society, but could only live in some sublunary region. Wherefore the body is formed with a regard to the performing of these functions, and thus otherwise in man than in the quadrupeds, reptiles, birds, and fishes. All are formed according to their nature, to which are adapted the gifts which each shall exercise.

(488.) The destruction of these ultimate forms is called dying, and the lowest are those first destroyed, and then in order the purer and the higher, even up to the soul or the spiritual form, which cannot be destroyed. First the angular form is destroyed, or their connection is severed, and the angular bodies which are in the blood and the humours are dissipated, wherefore so slight a portion of the blood is seen remaining in the dead. Afterward the circular form or the form of the several viscera is destroyed, and also the outward form of the body, which collapses, then the brain or the spiral form, and so the remaining ones in their order.

(489.) Any thing is said to die or to be destroyed when that which is proper to its form perishes or is dissolved; thus the situation and the connection of the parts, their order, and thence their state, are the peculiar property of a thing, and besides these there is nothing which is proper to any form; and when these are dissolved then the form perishes or dies, and then all that affection which was adapted to it passes away. Thus the soul is no longer able to perceive those things which agree with itself, namely, the modifications and affections of the ultimate world and its harmonies, or sensations and the like impressions, nor to perform the other bodily functions, for every muscle is destroyed; and although each motor fibre may remain, still the property of the muscle as such perishes, for the situation, connection, order, and state of its motor fibres are destroyed. The motor fibres may be dissolved and die, and still the nervous fibres which composed them remain. On the dissolution and perishing of the nervous fibres the simple fibres remain, and so on. So also in the other viscera, and even in the organs. For as these were successively formed so are they successively dissolved, or as they are born into life so do they perish [or are born out of life (denascuntur)]. The lowest forms, because they are changeable, inconstant, imperfect, and their determinations less harmonious, are always the first to die, and so in order up to the foremost. The triangular form perishes before the circular, the circular before the spiral; for there is always something of the perpetual added or something of the finite and inconstant taken away as the form ascends. This is the reason why the dissolution of forms and hence of the body, which consists of forms of this kind, takes place in this order.

- (490.) Hence it follows that more time is required for the dissolution of any higher form than of a lower, and more for that of a circular than for that of an angular form. Thus death proceeds from the external to the internal man, and the more slowly as the progress is more to the interiors.
- (491.) But let us take the blood as an example. A globule of this consists of all the forms even to the first spiritual. The red blood is first dissolved, and the angular elements are dissipated, which effect takes place immediately; next the pure blood then remaining is dissolved, but after considerable lapse of time: then remains that which properly is called the animal spirit or its individual part; this is not readily dissolved because it is a celestial form. After this remains the soul purified from all that is earthly.
- (492.) Thus by death that is given back to the earth which was taken from the earth, as whatever was in the blood and its humours; and to the air what was likewise taken from it; as also to the ether. That remains which is purely animal, and the animal property, namely, the soul [anima], which is alone what lives, and lives in the

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body according to its organic forms. Thence all that life dies which belongs to that organism, that is, the external, ultimate, lowest, and inferior life of the soul. Therefore dissolution is predicated of the organism, and death of the life of that organism.

- (493.) The question arises therefore, What lives die, or what organic connections are dissolved? For there are as many degrees of life as there are degrees of organs. The life of the tongue is different from that of hearing, that of the ear different from that of the eye, and that of the eye from that of the internal sensory which is called perception. The life of the sensory is, further, different from that of the intellectory, and that of the intellectory from that of the soul which is spiritual, and is the all in the remaining lives in which it lives according to form and by forms. The forms themselves are called organic, and they are the substances themselves whose affections are called sensations.
- (494.) In order, therefore, that we may know what forms are dissolved or what lives die, this is sufficiently beyond question, that the common life of the body dies, or that the general nexus of all its parts is dissolved; likewise the external sensory organs, touch, taste, smell, hearing, sight, with organs of each, as also the internal sensory, with the intellect and the rational mind, that is, the cortical glands with the changes of their states. For there was no such intellect in the embryo, hardly any in the infant, it has increased with age, is completed in the adult, then decreases in old age, is enfeebled and suffers in disease, and therefore also dies with the body. This intellect indeed has been acquired, to the end that the soul by means of it might perceive what goes on outside of itself, and indeed through the senses, and also that it might perform those functions which are to be exercised in this lowest world. When the soul no longer lives in this ultimate world, nor wishes longer to perceive what is going on here in these lowest spheres, nor what

requires to be done in the earth, and in a terrestrial society, then with the necessity and the use the faculty itself perishes and also the organ predestined to this use.*

O how miserable should we be if after death we lived in a rational mind, with our imperfect intellect, with our inconstant will governed by so many changing states and desires, and we ourselves partly spiritual and partly animal! Such a mind could equally be changed, and after its intervals die, in the future as in the present life, for it would not have changed its nature. Therefore our rational mind with its desires and affections, and our intellect with its principles, opinions, and reasonings, die and do not survive their body.†

(495.) As for the pure intellectory to which belongs the pure natural mind, this indeed also seems to die or to be dissolved, but after the longest delay; for it is a celestial form, and there are no forms present which can destroy it; but how long this continues it is not in our power to say. As for instance, how this mind or animus can survive a long time after death, and not be able to operate, as its common or external form is dissolved, and it is yet unable to acquire to itself a new form. But this let us dismiss as something wholly unknown, whether, for instance, the human animus may survive the life of the body even to the Last Judgment,‡ when its parts are to

^{*} In his subsequent theological writings the Author teaches a very different doctrine regarding the relation of the intellect and of the rational mind after death. Not only are all things, even of the external memory, preserved, but they go to form a kind of cutaneous covering of the spiritual body after death, preserving its personal identity or individuality. This external memory is indeed quiescent, and nothing imbibed through the senses in the material world is any longer active except what has been made rational by reflective use in the world. The cutaneous covering of the spiritual body consists of certain "natural substances belonging to the mind," which are taken from the natural world, but which at death recede to the circumference, and become quiescent and inactive. By "natural substances belonging to the mind," and retained after death, we are not to understand material substances, that which is natural in the order of discrete degrees being not necessarily material in form. On these points see the Divine Love and Wisdom, no. 257, 388; Heaven and Hell, nos. 461, seq. [Tr.

[†] Compare nos. 508, 525, 536. [Tr.

[‡] Here again is suggested an idea wholly repudiated in the author's theological

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be resolved into their principles by a most pure elementary fire. Into these mysteries, however, let us not penetrate.

(496.) But it is asked, Why must the body be dissolved, or the corporeal life extinguished? The reason why this is ordained of the Divine Providence is very evident if we regard the end of creation, that, namely, there may be a universal society of souls which shall constitute heaven, and which would be impossible without a seminary upon the earth, and without the death of those dwelling therein, and thus a perpetual succession; as also in order that souls may be formed in their bodies and reformed into the eternal state. What is earthly and corporeal cannot be perpetual, because it is changeable in itself, inconstant, imperfect, and always decreasing. Death is therefore inseparable from the corporeal life, especially since it is subject to the will of the rational mind, which always takes away the corporeal life [quae semper aufert vitam corpoream].

(497.) Beside this, the soul never would be able, without death, to be left to its own right and free will according to its nature of living; for it is interwoven in

writings, namely, that of the Last Judgment as occurring at the end of the world, and as accompanied by a material conflagration. In the True Christian Religion and in the treatise on The Last Judgment, he teaches that the passages of the Scriptures treating of the end the world, being written, as all the Divine Word is, according to the law of correspondence, are to be understood according to their spiritual meaning, and as relating to the end of the first Christian Church or dispensation, owing to the extinction of its faith and charity; and that the Last Judgment takes place, not in our material sphere, but in the world of spirits. In the separation of the good from the evil spirits there, and the inauguration of "a new heaven and a new earth," in the sense of a new angelic heaven of those who are saved, and a new Church on earth of those who believe in the Lord and obey his commandments. In this sense Swedenborg declares that the "end of the world" has already come, and the Last Judgment has already taken place, and that the former Christian Church has accordingly reached its end; and that a new Christian Church is now being formed of those who receive the Lord in His Second Coming, worshipping Him in His Divine Humanity as the only God of heaven and earth, and endeavouring by a life of faith and charity combined to keep His commandments. This "Second Coming of the Lord" is not in person, but it is in the Word, which is from Him and is Himself; and it is effected by means of a man before whom He has manifested Himself, and whom He has filled with His Spirit to teach the Doctrines of the New Church through the Word, from Him" (see Swedenborg's True Christian Religion, no. 776, seq. [Tr.

the body, or is the form of its own body, and so bound into it that it cannot act otherwise than according to the ability of those forms which it has attained; thus it is most limited, and nothing is left to it but to wish and desire other conditions. In order, therefore, that the soul may be left to itself, it is necessary that its ultimate form be dissolved. Even the soul itself desires often to be dissolved, especially when the loves of the animus have driven out the purer loves, and the soul lives as it were subjugated to the body. Then the soul itself conspires for the dissolution of the body, and indeed by those accidents which often befall us unawares and are the causes of diseases and of death; but concerning these points more will be said elsewhere.

These subjects, however, and that of death itself, must be treated distinctly and in their several divisions, that they may the better cohere.

XXVII.

OF THE IMMORTALITY OF THE SOUL.

- (498.) What the soul is has been defined and described above, namely, that it is immaterial, without extension, or motion, or parts; hence it contains in itself nothing that will perish. But these are rather verbal predications than true definitions, inasmuch as these names do not suit the higher forms, although they have something analogous thereto in their meaning. For except from analogy one cannot avoid in the above definition the idea of nothing; hence we betake ourselves rather to the form itself of the soul, since it is said that the form of the soul is spiritual and that in the spiritual form those things are infinite which are finite in inferior forms. According to this description also every idea of place, thus of centre and surface, above and below, hence of motion and extent, perishes or is abolished. This follows from the idea itself of the form, namely, that it contains nothing in it which can perish. For there must be a changing in the position and connection of parts in whatever perishes or is destroyed; and in a form which embraces no idea of place, centre, surface, or in which the centre and the circumference and surface are everywhere, destruction cannot be conceived of. This form is the very contrary of destruction, looking only to perpetuity; and indeed, the more it is attacked the more it resists every effort of destruction.
- (499.) If we examine forms in their order it appears that as the form becomes higher, or ascends to something superior, there is always something of perpetuity added.

Thus in proceeding from the angular to the circular the circle becomes perpetual, and all the lines and planes conspire to a certain perpetuity. But since this form, both by expansion from centre to circumference and also by resisting the blow of other objects on its surface, either returns to itself or enters upon some other state, therefore lest it, the circular form, should that perish by expansion, there is that which is perpetual in the spiral form. For the coils terminate in a kind of circular surface and return to it; and so by expansion, as also by this returning and keeping the unbroken surface in view, this figure is more sure of permanence. But still, inasmuch as this spiral figure has regard to a centre, it is yet liable to destruction. The possibility of perishing is done away with, however, in the forms still superior, as in the vortical and celestial; thus such is the perpetuity in the spiritual form that, by virtue of its very nature, the form is secure. For one determination so regards another that each renders the other entirely safe from every injury. results from the form itself, and the perfection in which it was created.

- (500.) Moreover, the spiritual form draws its essence immediately from God by inspiration, as a child from its parent; wherefore it acknowledges Deity or God Himself as its father immediately in creation, and that it is and exists from the immortal and eternal itself, and can neither be destroyed nor become mortal. This is the reason why the soul is immortal, not from itself but from God, who alone is immortal in Himself; thus through Him does the soul become so.
- (501.) Since, therefore, the soul is the inmost and supreme of all forms, the first natural form itself is beneath it, and the inferior forms recede even to the angular, as earth recedes from heaven; hence the soul can in no wise be touched, still less destroyed, by these lower forms which are in nature. Tell me, how can that which is inmost be destroyed by those things which are without or that

which is supreme by those which are below, or that which is simple by those which are compound, or what is prior by what is posterior, or what is most perfect in itself by things which are imperfect in themselves? For the imperfect derives its ability to exist at all from the perfect qualities which it contains. That which has in itself the infinite cannot be touched by the finite, still less destroyed; what is constant in itself cannot be destroyed by what is inconstant. The very superior forms themselves, especially the spiritual, are able to undergo infinite changes of their state, since in this their perfection consists. If we suppose any attack, collision, or the like to take place, such as occurs in inferior forms, then its state is able to be changed in any manner, and even to return to its natural state; comparatively as the natural substances which are most elastic can be bent and unbent, expanded and compressed, and still return to their own form. Thus as they are acted upon so they act, and hence cannot be forced by any power or shock out of their natural state.

(502.) Hence it now follows that nothing terrestrial can by any means touch the soul, whether it be what flows in air, ether, or fire, nor anything atmospheric, not even the most pure fire of nature. All these are far below the soul and have no contact with it, nor if they did could they exercise the least force, for the soul is safe in its own form. This also is evident in the body itself, where there is so great a disturbance of the most volatile parts taken up from the earth, the aerial atmosphere, and the ether, but still these do not disturb or injure even the least organic connection, place, or order. Myriads of the substances such as belong to the soul might meet in the smallest angular form. It would be like saying that a large beam might split in two a single particle of some ether, when the fact is that myriads of such [ether] particles touch so obtuse a mass, and even permeate its pores; or as if you should say that the posts and beams of a house would extinguish the abstractive and directive force of the magnet, when this flows through the metals themselves and all things. Such would be the injuring or the obstructing of the operation of the soul or spirit by those things which are the most minute angular forms of nature, or fire. For the magnetic force itself pervades even fire and flame, although in vortical forms. What then must not the soul be capable of which possesses a form above the celestial?

(503.) Besides, it is contrary to nature that that can be destroyed which is without weight or lightness, or which does not resist any weight, but acts according as it is acted upon, or where action and passion exactly correspond. But what agent can there be to destroy the soul? Since there can be none without or below it, for such things do not touch it; and in order to destroy the determinations themselves of the soul the agent must at least reach them and touch them. But that also which is above does not destroy the soul, for this is divine; this preserves rather than destroys, and all the more surely since human souls are the ends of creation, and constitute the kingdom of God. Nor indeed does that which is within destroy the soul, but it rather preserves it, as has been said above of form,-showing how this protects itself.

(504.) Spiritual death, however, is not the destruction of essence and of life, but of the better life itself, inasmuch as the soul is removed from the love of God, from wisdom, felicity, and perfection, and has ceased to be the image of God; and in heaven this constitutes spiritual death. For life itself consists of the truly spiritual loves; and when these are extinct, and in their place the contrary loves succeed, or hatreds, then that is said to be dead which truly lived. Truly to live is to love God and to be wise. In such life remains that form itself, and that essence itself which cannot perish. But there is only a perversion of state, or the state of the form is so changed that it no longer corresponds with the divine loves, and thus that

image of God is lost which requires a state conformable to its loves.

(505.) But it is asked why the life itself appears to die and be destroyed with our body, or what appears to be the life itself, rather of the body indeed than of the soul, as in the case of swoonings and ecstasies, dreams, drownings, the buried coming to life, embryonic existence, and other instances, where the subjects are entirely ignorant after their resuscitation into the bodily life that they have been living meanwhile. No sign remains impressed on their memory of what they have thought, or indeed of their having thought at all. From these and similar examples it appears as if life were merely corporeal and not at all of the soul.

(506.) But in these as in innumerable other instances we are deluded by appearances; for the life of the soul is not like that of our sensation or perception, or even like that of our thought, but is more perfect and superior, flowing into the thought itself, and perfecting it in order that the mind may think. But the thought itself is something that is learned by practice; it is a faculty of the rational mind, and it perishes together with the body. What the pure life and intelligence of the soul is, and how it flows into the thought, may appear from reflection alone. in that, namely, the soul naturally enters into all the secrets of any knowledge when it operates in the body, and in the sensations and thoughts; this knowledge being not acquired by the soul, but inborn, and flowing in from the life of the soul. Does not the eye explore all the secrets of optics, the ear those of acoustics, in order to know of itself and of its own nature how to form sounds and how to put together what shall be harmonious? Does not even a little boy, whenever he thinks or forms a judgment, or speaks, traverse all the first philosophy, logic, dialectics, grammar, and so forth, yea, the most hidden things of these sciences? Thus it is that we learn from ourselves all this knowledge. When the soul acts or produces the least action, or moves a muscles, it runs through all chemistry, mechanics, mathematics, and physics. Hence may appear what the life of the soul is in itself, namely, that it is such as it is of itself; it is not something acquired by learning, like the knowledge of the rational mind whence come imagination and thought. Therefore the inmost life or essence of thought derives its origin from the soul, and thus thoughts may be withdrawn, and still the life of the soul or the highest spiritual intelligence remain.

(507.) Since the life of the soul is such as we have described, it cannot leave any impress on our rational mind; for it is an intelligence so universal, pure, simple, and superior, that its thought cannot be exercised by means of words or material ideas in the manner that we think; hence it can neither impress the sensory, nor in the absence of the ideas of memory induce any change in it. Inasmuch, therefore, as the soul in such wise shapes its ideas without speaking words, but rather understanding inwardly those things which the mind speaks or thinks, it follows that this life of the soul can least of all impress anything of its memory on the mind, which understands things only in the crudest manner [comparatively].

(508.) But that this very life [of the soul] is our own, yea is the life of the body itself, and that we are to return into it after the dissolution of the body, is apparent from this, that the soul is that which experiences sensation, namely, it hears, it sees, it perceives, it thinks, judges, wills, but according to an organic form, and not otherwise. This also is vividly shown in that the soul does not seem to live separately [from its bodily organs] except as these external forms are successively destroyed; thus the sight appears as if it were in the eye, but the eye being closed we still see with a sight, and the more the eye is closed the more the internal sight and imagination are perfected; and so much is this the case that the external sight may be rather a hindrance than otherwise to the

internal sight. Likewise the imagination and thought seem so to cohere that without the imagination the thought would seem to perish; but yet in order to think profoundly, and to enter inmostly into things themselves it is necessary to remove the material ideas of the imagination, or to abstract the mind from material things, since only thus can we think purely. This comes by abstraction; thus the thought returns and is separated as it were from its external form. Such thought also leaves almost no impress whatever on the internal sensory, except so far as it has become fixed in some material idea or figure. When, now, this entire material idea recedes, there remains the life of the soul, which can make no impression on the sensory. Nor does it put itself forth as it is, in the embryo or infant; although it is possessed of just as much intelligence in the smallest infant as in an adult mind of the acutest judgment; but it is unable to put itself forth except so far as the rational mind is furnished with ideas of the memory, by means of which it may express itself.

(509.) Such is the life of the soul unmixed with ignorance, having no imperfection, having all knowledge in itself, so that it may be knowledge itself, truth, order, and intelligence. As such it can by no means perish; nature which is destructible is subject to it, and so the life of that form seems to die. The veriest life of the soul is the veriest life appertaining to us; and it does not come to itself so that we may be conscious of it before all that life of the forms which are below itself, and in which it is has been involved, has receded.* These the life itself destroys in order that it may free itself from their chains, and be restored to its own right and freedom of acting; for just as the soul knows how to form its own body, one viscus after another, how to escape from the womb, how to

^{*} Observe the use of this term by the author in *Divine Love and Wisdom*, no. 257, referred to in note to no. 494. Here, however, the author teaches that the "receding" forms are destroyed by the emancipated soul; whereas according to the subsequent doctrine they are retained, although quiescent. [Tr.

nourish itself at the breast, and many other things, even as the caterpillar knows how to transform itself into the butterfly, and to destroy its pristine form, so also does the soul know how to destroy its own forms, to restore itself to liberty, and thus to migrate from this dying, imperfect, and inconstant life to that which is immortal; and this could not take place without the death of the body's life.

(510.) From these very operations of the soul it may be seen what its form is; for the soul is that very substance in which form has its being; its intelligence is that distinguishing faculty and quality of the forces and modifications [which we call form]. Thus from form, and also from intelligence itself, it may be deduced and clearly seen that the soul is immortal.

XXVIII.

OF THE STATE OF THE SOUL AFTER THE DEATH OF THE BODY.

- (511.) Every one desires to know what will be the state of the soul after death. There is no one who does not conjecture that the future state will be such as was that of the bodily life, or that which was lived by the rational mind: for who that has not in his mind penetrated into the degrees of life can conceive that there is any superior, more perfect, universal, or abstract life [than that of the rational mind]? They are few who deny any continuance of that life which they attribute to the soul and to the animus; the wise men of the gentile nations unanimously believed in this surviving of the soul, as may be seen from the Greek authors, the Sophists, Plato, Aristotle, as also from Cicero and all the rest; besides, in order to place this doctrine beyond all chance of doubt, Pythagoras and Socrates even have attempted to describe the state of the soul after death. We Christians, still better informed out of the sacred Scriptures, not only believe in the immortal life of the soul, but also that there is a happy state or heaven, and an unhappy state or hell. But let us pursue the psychological principles propounded by us in their order, and set forth what these principles dictate.
- (512.) It is the common opinion that at once, after the death of the body, the soul is separated and flies away and leaves its corpse. But when we consider that the universal form of the body exists only from the one sub-

stance, the soul, or from the soul (for there is nothing which does not begin with the simple fiber, and the simple fiber is from the simple cortex, and so on); and since the soul is the real essence and substance from which is the universal organic form of the body, and thus the all in every part, and residing as it were inmostly and in the centre of all, even in the blood itself, whose principal essence is the soul which is in it, it follows that the whole soul does not fly from the body in the moment in which the life of the body is extinct, but that it remains so long as there are any parts not dissolved in which it inheres. This is proved by many instances of those who some days after their funeral rites have been performed have come to life again, and continued a life of years among mortals, as the historians tell us. There are those also who have been suffocated in drowning or in constriction of the throat, and after days have revived. Meanwhile the soul cannot have left the body, and when the obstructions are removed, the water discharged, the soul re-enters at once its abode. There are also those who resemble the dying in undergoing swoons, syncope, and like attacks, when nevertheless the soul does not depart, but remains and lives although the body be as it were extinct. There are also many examples even in the sacred histories, of its being forbidden to violate the bodies and bones of the dead, so that they may remain in peace and not be dispersed. Samuel also was raised again; and many other instances are related in both sacred and profane history. We know as it were from an innate sense. or as if the soul itself dictated it, that if the bones of the dead are disturbed their shades will confront the violators; and about such occurences also many stories are told. The religion, too, of some people has been to kiss, venerate, and beseech the bones of heroes and saints in order that these may give or procure aid. These things would be the merest vanities if the soul should go forth entirely from the body, and only that which is terrestrial remain.* Meanwhile, from the tenor of our arguments it follows that the soul which procreates the form itself of the body and of its parts, as also the blood and the animal spirit, can by no means be released from its bonds until the lower and more changeable forms be first dissolved. Although it is not to be denied that much of the soul may be dissolved from its bonds, still it is not on this account separated. It is contrary to the nature of spirits that those substances which are born and made for the completion of one system should be separated. What is interwoven with other parts may indeed be separated; still although dissolved from those bonds it appears that entire separation from all bonds is impossible before the intervention of a most pure elementary fire, or until the conflagation of the world.†

(513.) But it is asked, What kind of a life is that which the soul lives while it still remains in the dead body, the order, arrangements, and connection of whose organic parts is wholly destroyed? That life must necessarily be a most obscure one, or merely life without intelligence. This appears from the mere definition of intelligence. All intelligence supposes not only an internal form and change of state in the single sensories and intellectories, but also an external form of these particulars, or one enabling them to preserve a mutual arrangement and order. This order being destroyed among the particulars, and with it their arrangement and connection, the communication of forces, modifications, and affections at once ceases; but there succeeds a certain irregularity from which results a certain kind of life, not distinct and determined, but confused and obscure, which may be named barely life without intelli-

^{*} The author's subsequent teaching on this point in his theological writings is quite different. That the separation of the spirit from the body takes place instantly when the respiration and systolic motion of the heart have entirely ceased, see Heaven and Hell, no. 446. [Tr.

[†] See note to no. 495. [Tr.

gence. To understand [intelligere] is to live distinctly and according to a form not of particulars only, but one entirely consentaneous, which form is the reason. For our intellect is at once disturbed when the situation and connection of the sensory or cortical glands are disturbed, as we learn from the accounts of diseases of the head. The sight is destroyed or weakened by the disturbance of the fibrous or liquid parts. The case is like that of colours when all the colours are mingled together with water, or when an infinite number of prisms and of the smallest irregular bits of glass are mixed together; there is then no distinct or beautiful colour, but only a whiteness resulting, which is the conflux of all.

- (514.) But when the organism is not yet destroyed or its order disturbed, there then remains a distinct life of the soul, as in the embryo, although the soul cannot establish a communication between its universal mind and intelligence and its rational mind, for reasons above given; hence no memory of itself remains after its resuscitation.
- (515.) But indeed, the substance of the soul, freed from its corporeal bonds, seems to live a distinct life, and indeed, all the more distinct for being liberated from these its hindrances. For these most individual entities form a society among themselves, and institute a most distinct order, being left to their own liberty and awaiting companions; for the greater the society the more perfect is the life. Whoever has lived longest, in him has the society, forming a unanimous body, become so much the largest.
- (516.) Inasmuch as the soul is distinguished most completely into substances of a spiritual form, it may be believed that the individual substances or forms will after dissolution become dissipated, and never again unite into the society of any one body. Such an opinion, however, arises from ignorance regarding the world and its purer nature, and that of purer beings. For we believe that

there is a something which remains when the little bodily particle is resolved into smoke, vapour, dust and ashes: but an entirely different process ensues with this. In that supreme, most pure, and perfect world, or that where nature is simple and prime, we cannot conceive of a disjunction of those beings which by virtue of their mutual harmony and likeness belong to a single body. living and spiritual substance of the soul recognizes its companion in the body as its own, nor can it live in mutual consort with any other. Nor does anything prevent their coming together, for there is no space, place, or time to disjoin them; these conditions all belonging to an inferior nature, and not to the supreme. Place exists respectively to lower beings in whose relations there is an upper and a lower, or right and left, a centre, surface, a diameter, thus in order that there may be a where. But in the supreme world, all respect of place is from soul to soul, since these are entirely distinct from each other: nor can these substances of the soul be separated, for one recognizes, feels, knows the other, even if it were as far off respectively as the sun from the earth, or star from star. When, indeed, such gross organs of vision as the eve can reach even from the earth to the sun and stars, what may not the the sight of the soul, the intelligence, include, capable as it is of being named a spiritual sympathy?

Since nothing prevents the coming together again of these substances of the soul, it is therefore only our ignorance of the purer world which deceives us, and suggests a dissipation which in that world is an impossibility. Especially since the omnipresence of the Divine Spirit acting upon all souls cannot suffer that anything pertaining to any one should be separated. For there is a Spirit which unites all things beneath itself, joining the concordant, disjoining the discordant, and so collecting together all souls. This follows of necessity, since if we consider the influx of this universal Spirit, it cannot do otherwise than

join together all things that have respect to one body, and vice versa.

- (517.) When similar phenomena occur in the world and in the lower and less perfect nature, why not in the superior and most perfect? For there nothing exists which is irregular, but only that which is most harmonious, concordant, and united. It is well known that shrubs, plants, flowers, roses, burned to dust are brought to life again in water, their vegetative lives or spiritual essences being as it were excited anew by some means. The very figure itself being thus excited, if by the breaking of the vessel it falls back into its ashes it yet again revives; and thus sometimes these parts cannot be so disjoined and separated but that they will come back into their pristine form, and unite again in their ancient friendship and habit after these vicissitudes, and indeed in such wise that they unite again into exactly their first form. Why then should not human souls do likewise after the destruction of the body?
- (518.) I need not speak of those manifest sympathies also recognized in this lower world, which are so numerous as to forbid their being rehearsed. So great is this sympathy and this kind of magnetism that it may often be communicated among thousands of persons. These phenomena are, however, by some attributed to mere idle tales; still experience itself establishes their truth, nor would I care to relate that the shades of certain ones after the death and obsequies of the body have become visible, which thing could never have happened (even admitting the fact, which I do not) unless the animal spirits were mutually conjoined, and not separated from their common fellowship. At least such a bond and love intervene in that body [between its constituent parts] that they preserve a mutual habitual relation, nor do they separate themselves one from the other. This also is the cause of mutual love or the love of the body.
 - (519.) That every substance of the soul associates to

itself another such substance is evident from the love of parents toward their offspring, whose soul the parent, because he knows it to be taken from his own, so inwardly knows and loves that he wishes again to be joined to it and to enter into it, which he endeavours in vain to do by kisses and embraces. What, then, will not the several parts of the universal soul of one body desire?

(520.) Meanwhile this must be confessed, that the soul of one would never be distinct from that of another if the state of the one were absolutely similar to that of the other. But since it is provided that there shall always be some difference between souls, therefore they cannot be conjoined, but each soul must form its own body and must live its own life. Thus one soul knows the fellow substance which belongs to itself and its own system, and so drawn by a certain sympathetic love it is unable to unite itself with any other substance, for that is not its own, and cannot be united with itself into one body. A universal Divine providence therefore reigns in distinguishing particulars from particulars, so that no one soul shall be precisely like another.

(521.) But it is asked, What is to be the form of the soul in heaven, whether similar to the bodily form, or another which is called angelic? and then, whether the angelic form is like the human form? This indeed I do not think, that we are to put on the human form.* For

^{*} How entirely contrary this is to the author's subsequent teaching may be seen from the following extracts from the work on *Heaven and Hell*, nos. 453, 456, and 461:

[&]quot;That the spirit of a man after its separation from the body is itself a man, and in the form of a man, has been proved to me by the daily experience of many years;

such a form exists solely for use in the lowest world. In heaven, souls are like birds, nor do they have intercourse with any earth; they have no need of feet or arms, hence neither of muscles, that is of flesh and bones, for they are spirits; nay, they require neither the red blood nor ventricle, nor intestine, nor mesentery, for these things belong to the reception of food, to chylifaction, to nutrition,

for I have seen, heard, and conversed with spirits thousands of times, and have even talked with them on the general disbelief that spirits are men, and have told them, that the learned call those foolish who think so. The spirits were grieved at heart that such ignorance should still continue in the world, and especially that it should prevail within the church, and said that this infidelity originates chiefly with the learned, who think of the soul according to their corporeal sensual apprehensions, and thus conclude that it is mere thought which when viewed without any subject in and from which it exists, is like a volatile breath of pure ether which cannot but be dissipated when the body dies; but since the church, on the authority of the Word, believes in the immortality of the soul, they are compelled to ascribe it to some vital principle like thought, although they deny it a sensitive principle such as man has until it is again conjoined to the body. This is the foundation of the prevailing idea concerning the resurrection, and of the belief that the soul and the body will again be united at the time of the Last Judgment; and hence when any one thinks about the soul from this doctrine and hypothesis he does not conceive it to be a spirit in a human form; and, indeed, scarcely any one at this day understands what a spiritual principle is, and still less that spiritual beings-angels and all spirits-are in the human form. Almost all, therefore, who pass out of this world into the other are astonished to find themselves alive, and that they are men equally as before; that they can see, hear, and speak; that they enjoy as before the sense of touch, and that there is no discernible difference whatever.

"A spirit enjoys every sense, both external and internal, which he enjoyed in the world; he sees as before; he hears and speaks as before; he smells and tastes as before; and when he is touched he feels as before; he also longs, desires, wishes, thinks, reflects, is affected, loves, and wills, as before; and he who is delighted with studies, reads and writes as before. In a word, when man passes from one life into the other it is like passing from one place to another, for he carries with him all things which he possessed in himself as a man, so that it cannot be said that death deprives man of anything truly constituent of himself, since death is only the separation of the terrestrial body. The natural memory also remains, for spirits retain everything which they had heard, seen, read, learned and thought in the world, from earliest infancy to the end of life; but since the natural objects which are in the memory cannot be reproduced in the spiritual world they are quiescent, as is the case with man in this world when he does not think from them; nevertheless they are reproduced when the Lord pleases...... Sensual men cannot believe that such is the state of man after death, for the sensual man cannot do otherwise than think naturally even about spiritual things; whatever therefore is not palpable to bodily sense, that is, whatever he does not see with his eyes nor feel with his hands, he affirms has no existence."

Regarding the great difference which nevertheless exists between the life of the two worlds and between the senses and their affections in each, see *Heaven and Hell*, nos. 462, 126, 235.

See, however, Appendix A, Thesis xii., where the doctrine of the human form of departed spirits seems to be already clearly maintained by our author.

the making of blood, and similar uses. Nor is there need of heart, inasmuch as there is neither red blood, nor liver, nor pancreas, nor spleen. Neither are there teeth, jaws. throat, trachea, lungs, nor tongue; there is no use of air, of respiration, speech, digestion; neither ear nor eye, for where there is no air there is no sound, and where no earth exists, there is no vision, nor could this be of any use. Even the members of the brain, with the meninges, and the medullae oblongata and spinalis, will there be of no use; with the use itself perishes all necessity for their being. For what use could the generative organs exist? All these things will serve for no use as soon as we become spirits and angelic forms. Hence it would appear that the soul is not to receive that form which is imperfect and not celestial; unless, as some hold the opinion, there shall be created a new earth and a new atmospheric heaven into which we shall be admitted like new inhabitants.

(522.) But it is asked, What form shall we have? This we can no more know than the silkworm, which when a miserable worm crawls over its leaves, but after its longendured labours is turned into an aurelia and flies away a butterfly. It does not know that it is to have an entirely different body which shall agree with the atmosphere in which it is to live; it does not know that it will take on wings and be provided with members adequate to that [new] life. And so with ourselves. We are grossly ignorant about the nature of that purest aura which is called celestial, and in which souls are to live, being completely furnished with such a form that, like birds in our atmosphere, they may everywhere traverse their spaces and fly through universes and heavens, their members and their form being exactly adapted to that life. Therefore until we know what that aura is, and what life we are to live in it, we are wholly unable to say what form we shall put on. This only may be said, that our future form is not to be such as this present one, but rather the most perfect of all; a form into which we shall be changed as nymphae and aureliae are changed to more perfect forms; a form to which our souls also aspire, and for this reason often would accelerate the death of the body; for this aspiration is inborn in the soul, and is not communicated to the body.

(523.) In the meanwhile, when the soul is left to itself. and is no longer connected with the organic forms necessary for the pursuit of the corporeal life there, it seems to be able to put on any form it may wish. So that if it should descend from heaven to earth, in a moment it might take the human form; for universal nature is so formed that it shall serve the spiritual life as an instrumental cause, so that it at once flows into conformity whenever the soul commands. Just as in the body, for the soul or spirit commands according as this or that act may agree with its will, and at once the body submits and hastens to obey. The soul wishes to view the visible world, at once the eye is shaped for every form of modification; it wishes to hear, and at once the wonderful organism of the ear exists; it wishes to walk, to fly, to swim, at once are provided the feet, the wings, the fins; and so with infinite other desires and capacities. Nay, the soul of the infant is often affected by the strong desire or by the fear of the soul of the mother in such a way that according to this single impression, a mouse, a frog, a rose, or other object appears upon the part of the body touched. These are evidences that nature readily hastens to obey when the soul commands. Accordingly after death, when dissolved from these organic bonds, whatever form it wishes as agreeing with its state, it seems to be capable of assuming. If, therefore, it should descend to earth, at once it would put on the human form; nay, if occasion should require any other animal form, to will this would be all that is necessary, everything else follows of itself. Nor would these be miraculous occurrences, for it would be no more contrary to nature than that one form out of an egg should

put on a human form, or should in the skin show the mark of the dormouse, or similar impressions made during the tender period of growth. The soul is constituted in freedom of determination, nor is it any longer limited as on earth. It can likewise put off that form, and dissipate it in an instant; yea, it can present a burning countenance and the like, as in the recorded appearances of the cherubim and the seraphim, and [the angels appearing to the] shepherds. The reason is that the whole form is from the soul, the very elements being at once assumed out of the surrounding atmospheres, and disposed in its intellectories and organs.

(524.) For even these essential determinations of the form depend on their action and interior principle within. in the soul. The soul is not carried away with the affections of any animus into these or those impulses, but solely into the uses which are necessary. To love novelties, varieties, curiosities, is natural to the animus and also to the rational mind; for to these there is nothing which is not unknown. Not so with the soul, from which nothing is hidden. Wherefore it is never carried away by curious desire. It follows as a consequence that the soul forms for itself its intellectories, which it disposes in harmonious order, since without arrangement and subordination, and co-ordination, nothing intellectual can be carried on; and therefore it also follows that the form of the body is purely a celestial one,* such as is the intelloctory; but as to whether it be a vortical form, this indeed we may surmise, although these are among the secret things, and at best but mere conjectures. If any one sees them, reason alone has convinced him of them. When we live as souls perhaps we ourselves shall laugh at what we have guessed at in so childish a manner.

^{* &}quot;The form of the spirit is human, because man as to his spirit was created to be a form of heaven; for all things of heaven and its order are collated into those which appertain to the mind of man. The human form of heaven is derived from the Divine Human of the Lord" (Heaven and Hell, no. 454). [Tr.

- (525.) It is not to be believed that in our soul-existence we shall be wise in the same manner as while we were living in our rational mind or human intellect, in which there is always, however, more of ignorance than of understanding. This mind, or our thought, as it appears to us, becomes entirely extinct, and the life of the soul remains, which is ignorant of nothing, but of itself knows everything; wherefore it is science itself and pure intelligence, which however does not speak or express its meaning by voice or words, these being so many material ideas, but it embraces at once everything which pertains to the subject of thought. For the intelligence of the soul is the same in the infant as in the adult and aged; it is what flows into our thought and makes us able to understand and philosophically to connect together all things which we think. Wherefore after death there is no such impure intellect; but when the soul flies away from the body it is like going from a dense shade into the open sunlight or coming out of a dark dungeon into the city of Rome, or into the whole world, or like a blind man being restored to sight. For the truths of our mind are mere hypotheses, fallacious principles, appearances, opinions, and the like; but those of the soul are the veriest truths themselves.
- (526.) But the soul, being pure intelligence and a spiritual essence, is above all sciences and doctrines; for these are natural, and stand still or go groping around far beneath. The soul knows the secret things of these sciences, which can never be penetrated by the mind, although always approached. For the mind is no more able to utter these hidden things than algebra its series of infinites expressed by the differential calculus in a long series, and incapable of reduction by the integral calculus. Therefore as to its state of intelligence one soul is precisely like another.
- (527.) But as regards its state of wisdom, one soul is never absolutely similar to the soul of another. For one

has within it more perfect and purer loves; it loves God above itself, and its neighbour as itself, thus the soul of one is ruled by Divine love; but that of another loves contrary things and hates what the former loves, and thus is rather to be called diabolical. From the study of spiritual loves it is manifest how far souls may differ. Therefore there are divine souls or those belonging to the divine society, and there are those which are diabolical belonging to the infernal society. All nevertheless enjoy the most perfect intelligence of the good and the true, but are affected with either the love or the hatred of these.

(528.) This nature souls derive in the corporeal life. and indeed by means of the rational mind. For the soul is then in the process of being formed into a good or evil state, but not into the intelligence of the true and the good. How the soul is affected has already been shown, and also what divine means ought to concur for improving and perfecting the state of the soul, for rendering it more complete and restoring to it its first divine image. But still when the body has left and the rational mind has become extinct, then the human soul has been formed; and so much and of such quality as it is it remains forever. For nothing can be present to improve it more. There is no influx from a changeable mind, or one that may be perfected or depraved. The rational mind alone is capable of this. There is no struggle between it [the soul] and the animus, or between the loves of each, thence no hope of victory. The intelligence is pure and most perfect; there is therefore no changeableness in it, by which another state of the soul might be brought on. It is not annexed to any organic form which it obeys; in a word, such as it is it remains forever, particularly as regards its loves and spiritual aversions, consequently as to eternal felicity or unhappiness.

(529.) Nor can this prevent the soul's knowing every thing which its mind ever experienced in the body, or

which the soul by means of the mind may have acquired in the world while an inhabitant of it. Since the intelligence is pure it follows of necessity that it shall know again and be conscious of the particular things which are in every verity and in every goodness; for otherwise it would not be a pure intelligence, but rather a confused ignorance. From the changes of its own state or from its acquired state itself, it knows all causes, infinite as they are; for there is not the least act voluntarily done but that the will, the desire, and the end of it has affected the soul. and in some way contributed to its state, and hence from its own state the soul knows every cause; it knows most perfectly that which in its own rational mind has been operating as a cause; and it also sees beforehand most perfectly what to expect, whether the happy or the unhappy.

- (530.) Therefore it enjoys the memory of the past; not such as is the memory and reminiscence of our sensory, which is given up to material ideas and images, but such as is pure and most perfect, so that not the least moment of the past life is hidden from it, not even a word which has contributed to the changing of its state. For all this the soul understands, not from any memory but from its own actual state, since all things past are present to it; yea, even in natural things, where is the connection of causes and of contingencies there is the presence of all future things; this flows from the intellect alone, which is the pure intelligence.
- (531.) The soul itself cannot change its own state any better then the body its deformed countenance, distorted mouth, its humped back, or the muscle causing the distortion or bringing on the change of state; all this inheres as a natural [deformity] in the body; and the more it wishes to mend itself the more it becomes deformed, so is it affected by its self-consciousness.
- (532.) In the meantime, the soul possessed of such a state of intelligence cannot otherwise than know every

thing which takes place in the heavens and earths; in the heavens by the communication of operations which cannot be otherwise than most perfect, when there exists in this life such a communication of minds and a kind of sympathy between friends and relatives. Granting such a communication of souls this also can be described; for the soul is occupied with its perpetual intuition of things past and present at the same time, and the celestial aura and common spirit of all things intervenes, which makes it impossible for the operations of one soul not to be communicated to another, since otherwise without communion there would be no connection of souls by love. This may be compared with our bodily hearing and vision; for there are auras and atmospheres which communicate to any distance things which occur most remotely, yea, the sight even takes in objects proceeding from the sun. Why should not the soul, which is pure intelligence, perceive the particular things which go on in other souls whereever they are? Such a communion as this is a logical consequence resulting from the celestial aura, the existence of which is admitted, and from the Divine spirit embracing all things, and from mutual love as its effect; but this communication is not susceptible of comparison with that effected by the bodily senses, the sight and the hearing, since nothing occurring in the universe can be hidden from the soul, for the intellectual sight can terminate only with the limit of the universe, as is evident from ocular vision.*

^{*} Here a passage is wanting; after the Author's page 109 follows 111. The subject of page 110, which is continued on page 111, would seem to have been, Concerning Heaven, or the Society of Happy Souls. [The Editor of the Latin edition.

XXIX.

CONCERNING HEAVEN, OR THE SOCIETY OF HAPPY SOULS.

(533.) Such is the difference of souls and of minds, such the perpetual dissensions, strifes, controversies, as well in things of philosophy as of theology, and in worldly and corporeal affairs, that one animus never agrees with another. Therefore so many schisms, heresies, and controversies are tolerated as though by special providence of God, and also so great power is allowed the devil at the same time, in order that he may disjoin the lower and the intellectual minds of men, and thus impress upon each soul its own special state. This also seems to have been the cause why it was permitted to Adam to commit sin. For in universal antiquity the soul of no one was distinguished from that of another, and thus there was no society. From this cause also seems to have resulted the strict prohibition of parents from entering into marriage with sons and daughters, and of brothers with sisters, and many other circumstances which would tend to conjoin souls; also that marriages are declared to be contracted and confirmed in God. Nevertheless, proofs are extant of the Divine Providence in the contracting of marriages. even to the least particulars. God also leaves every one his own free choice in acting, and as it were decrees that the liberty of any one shall not suffer the least injury, but rather that every one shall be permitted to rush into his own destruction or that of others; since the liberty itself of human souls is the sole means of disjoining the lower minds, and hence also the souls of those who are mutually affected.

(534.) The Divine Providence operates therefore especially in distinguishing particulars from particulars, inasmuch as it is the end itself of creation that there shall be a most perfect society of human souls. For the ultimate end ought to be that which is the first and the last of creation, all things else being means to this end, as will appear if we examine each separately. The progression itself of means extends even beyond nature. Can any one say that an earthly society can be the ultimate end, when the body exists on account of the soul? Must there then not be some further end on account of which the soul, and heaven, and the universal exist? Can there be any other end than that there may be a society and kingdom of God to be constituted of all human souls? These conclusions are so clear that we do not know whether they can be called in doubt, and so manifest that they are capable of confirmation from everything existing in the world.

(535.) Since therefore no soul is absolutely similar to another, but rather some difference or diversity of state intervenes between all, this has come about not merely that souls may be mutually distinguished, but that the most perfect form of society may thence arise. In a perfect form of society there ought to be not only a variety among all, but such variety that the particulars shall so accord as to constitute at the same time a society in which there shall be no want which some one may not supply. Such a form there is in the atmospheric world itself or in the macrocosm, and such there is in every body between its constituent parts, be it the fibres, the cortical glands, or other parts. This variety I call harmonical; it is such, in fine, that all the various parts are mutually related by a certain natural analogy, and thus constitute a society which may be one. For nothing can coalesce and as it were constitute one form unless there be an analogy between the determining parts and the determinations. Hence arises conjunction, and hence it is that harmony is pleasing and conjoins, but disharmony is

unpleasant and disjoins. Therefore a form of government can by no means be called perfect unless there be in it a variety, and in that a harmony wherein every one has relation to another rightly, according to natural laws. The analogical or harmonical similitude itself resembles identity and union. In no other way is it possible for a most perfect society, or form of society, to be instituted.

- (536.) But that harmonious variety does not consist in the external variety, but in the spiritual variety of souls and of love toward God and the neighbour, since the state of the soul concerns solely its spiritual state, namely, that it may be near to its God. So long as any difference or any distinction is wanting, just so long may it be said that a certain place is wanting in heaven; so that all differences are to be supplied before the most perfect form can exist.
- (537.) But are there to be many societies, and as it were many heavens, out of which is to arise a universal society which is called the kingdom of God? This seems also a possible induction; for all variety, even that which is spiritual, supposes some order, subordination, and coordination; so that in the earth one particular society has reference to another, and all taken together constitute a kingdom. This seems to follow as a conclusion from the supposed admitted variety of the state of souls. For that the form of governments may be perfect it is necessary that all the societies shall produce a general harmony among themselves, just as the several members constitute each a particular harmony.
- (538.) This is called the kingdom of God; but the true kingdom of God is on this earth, which is the seminary of that kingdom above. This is not confined to any certain religion or church but is spread over the whole globe; since God chooses its members out of all, namely out of those who had really loved God more then themselves and their neighbours as themselves. For this is the law of all laws; in this culminate all rights, as well natural as

divine; all other things, including ecclesiastical and other forms, are means which lead to this. This His church God collects from the universal globe, until all places shall be occupied; allowing that difference in the form of government still to remain which is necessary in order that the most perfect unity may result.

(539.) But there could be no such society without its head or chief, who should be indeed a man without offence or wrong, the conqueror of all the affections of the lower mind, the embodiment of virtue itself and piety itself, loving God above self, and his associates as neighbours: thus a divinity in himself, in whom the universal society would be represented, and through whom the members of the society might have access to their Deity. Without such a king of souls in vain would a society be collected, exist, and subsist. This also follows of necessity from the admitted form of the government, from the disparity of the states of all, and from the nearness of God through love. This form would therefore be constituted wholly by those purer ones of every degree, consequently by the purest of all, who should be without sin, that is, by our Saviour and Preserver Jesus Christ, in whom, through faith and love, we are alone enabled to approach the Divine throne.*

(540.) Behold the form of the government of society or of celestial societies, yea, the kingdom of God briefly

^{*} So far as this refers to man's ability to approach and to know God as a visible and personal Being, by means of the Divine Humanity which He assumed and glorified in Jesus Christ, this expression is not inconsistent with the theological teachings of The True Christian Religion; but it would be wholly so if understood as implying the mediation of Christ as a person distinct from the Father, and thus a trinity of persons, instead of the trinity of person, or the unity of Father, Son, and Holy Ghost in the one and only Divine Person, our Lord Jesus Christ; just as the soul, body, and operation unite in constituting the person of one man. So the Apostle Paul teaches that "in Him (Christ) dwelleth all the fulness of the Godhead bodily;" and our Saviour Himself declares that "He is in the Father and the Father in Him;" that "He that seeth Him seeth the Father;" and that "He and the Father are one;" also He breathed on His apostles, and said, "Receive ye the Holy Ghost;" implying that this is a Divine power or energy imparted from Himself, and not a distinct or third person in the trinity (See the Doctrine of the Lord, and The True Christian Religion throughout). [Tr.

shadowed forth! The form of the government itself cannot wholly differ from the perfect form of government of earthly societies; at least, whatever feature in these is imperfect there is most perfect; and those are spiritual loves which distribute the dignities, and they are nearer to their chief; thus also each one possesses his own heaven and enjoys his own happiness.

(541.) In such a society there cannot but reign every joy, happiness, and felicity, replete with the inmost essence and most delicious sense of love and of virtues. But no tongue can describe that felicity, and those joys, for they exceed by infinite degrees corporeal delights, which in comparison stand as shadows or mere trifles of delight. and hardly to be counted as such. If human delights which are innocent should be exalted to their highest degree or concentrated in the inmost, then some idea might seem to be formed of it. It is a universal society whose units are to be counted by myriads; it is the most perfect communion of all, or a perfect consociation of spiritual minds, such that whatever is in one mind is common to another; thus there is one soul in the society, and likewise every variety possible in the universe, which diffuses and at the same time concentrates the felicities of mind. The happiness is concentrated upon each one of the society, and by each one it is diffused, and thus it is multiplied infinitely, if there are many societies, constituting among themselves also a form of government and of variety. For whatever was once pleasant in life and at the same time pure is now exalted to the highest degree; nor is the communication of minds effected by means of language. but by a certain activity of mind, whence comes the angelic speech, which expresses nothing whatever by words or by material ideas, but is able at once and by one operation to express what we can only do by thousands of words. The sight is not ocular but internal, so that we may know what goes on in the universal society with its infinite variety. For there is an intuition of all past

things as if present, that is, as if divining by the aid of all things that ever have been on the earth. There is a representation of the universal heaven; in a word, the infinite varieties which suffuse souls with ineffable delights. Nor does an impure love exist there, but the pure friendship which has succeeded in its place. Nor is there any thought of the future, or desire, hope, or anxiety. All things are there without anxiety, and without fear of loss: most constant, eternal. Hence the veneration and adoration of their Deity, in whose praise the heavens of heavens resound; the other spiritual delights being elevated thereby to a still higher degree. But these are only a few of the features of that life; for to narrate them all were impossible. Such seems to be that most distinct life which is life indeed; whereas the bodily life is only a representation of that life, its shadow and its dream. For to live is to understand and to be wise, and to live by love with Him who is life itself is verily to live.

(542.) From these observations it follows that by unanimous consent [the blessed ones] conspire to the glory of their Lord and to the love of the citizens in heaven and on earth; for the joy is elevated according to the number of those associated, and at the same time the inmost rejoice in love that the kingdom of God is increased, for this is the effect of either love. At length from so many pure minds the common animus of the society is inspired, just as in our body, for one animus or lower mind is inspired by the minds of the intellectories. So it is with the common intellect. What influx, however, that common animus has into our souls, this is not to be described here; for the communication of that society with us takes place only through our souls. Therefore may Thy kingdom come and Thy will be done on earth as in the heavens!

XXX.

CONCERNING HELL, OR THE SOCIETY OF UNHAPPY Souls.

(543.) The society of those who live in the contrary loves, or in hatred to God and their neighbour, is called infernal, diabolical, unhappy. It exists wholly in order that there may be every variety interposed between the two, and indeed actually; for in the spiritual idea of the soul there can be no existence which is not actual, since the soul is pure intelligence, nor is it obstructed with any shades of ignorance. Nor can intermediate things exist without their opposites, for their quality is only known by knowing their relations in opposition; hence the devil actually exists, and an infernal society or a society burning with the love of destroying the heavenly society. Without such an evil society the blessed would not be kindled with any zeal and ardour, nor would their souls burn with eager desire to protect the church. Thus they feel their happiness increased by the existence of a life contrary to their own.

(544.) Into this society come all souls which hold in hatred God and the neighbour; from their principles, that is from their love, flow forth crimes and wickednesses of every sort. They are defiled with vices; they themselves suffer most deeply from their own consciences, when they behold with open eyes the truths which in this life they had endeavoured to dissipate with specious arguments and sophistic reasonings. But when there is no ignorance, only a bare knowledge of truths, as after death, in souls, and when the state of the soul has been already deformed,

and has so drawn down that nature that it cannot return to its more beautiful state, then it cannot help suffering the most deep and intense auguish and torture. And because this suffering is spiritual, and in the soul, it cannot be described in words nor conceived in ideas, for it surpasses flames, the gnashing of teeth, and many other punishments of earth. It is as though they were inwardly suffering from blazing and boiling oil poured from an inexhaustible vessel.*

(545.) That this society also should be provided with its leader and chief would seem to be undeniable, because all these souls constitute one society or hell, and without a leader one would rush upon another like Erinnyes and Furies.† No higher or mutual love conjoins these souls, but only the fear of their leader or chief, to whom perhaps is given the power of torturing their subject souls as often as they do not perform their duty. And so long as it is a society there seems to be some hope remaining of warring against heaven, and of exalting oneself to the throne. They know, indeed, the impossibility of this, but nevertheless a pure hatred so persuades them. Therefore so long as they enjoy any hope, and as this grows from the increase of their numbers, they seem in some manner to be happy, not inwardly but superficially, just as the envious are inwardly pained at the misfortune of even an

^{*} In his theological writings written after his illumination, Swedenborg teaches that the spiritual planes or degrees of the mind becoming closed or inactive by a life of evil in the world, the wicked, after death, have no knowledge whater of pure or heavenly truth or good, but live in a perpetual hallucination, seeing falsity as truth and evil as good, and unable even to endure the light and heat of heaven. The torments they endure are therefore not those of conscience or of remorse, for these imply some remaining knowledge of, or regard for, Divine truth, which no longer exists in the infernal spirit after the judgments in the world of spirits. The punishments endured by the wicked in hell are those which are necessarily inflicted to hold them in restraint and prevent their destructive loves or hatred from exceeding their alloted bounds (see *Heaven and Hell*, nos. 508, 509). [Tr.

[†] That there is no single supreme Devil who rules over hell, but that the government of the hells is effected by the Lord from heaven, through the agency of angels, by a generally restraining influence, as also by direct punishments inflicted by malignant spirits who excel in cunning and artifice, and are set over the others, they themselves being held within prescribed limits (see Heaven and Hell, nos. 543, 544. [Tr.

unknown person [not from sympathy or love, but because] this reminds them of the misery that they themselves are to endure forever.

(546.) But nevertheless, in the Last Judgment, when the splendour of omnipotence, omnipresence, wisdom, justice, and Divine love, shall shine forth most fully, so that each one may view his previous life clearly depicted in his own state, and without the sentence being pronounced may know of what punishment he is worthy, since all things will then be manifest, although in the mediate light of wisdom, then this society shall lose all hope, and shall contemplate in full view its eternal ruin; and while it beholds not only the kingdom of God, but also the felicity of the members of that society, so completely and purely revealed, hatred becomes changed into envy, and envy into misery and anxieties. Then it is that this castoff form of society, from its own inward hatred, as though of a furious madness, rushes violently upon some other; and through the communion of souls agreeing in their hatred toward heavenly society, but discordant among themselves, one becomes the devil-tyrant of another, with all reins let loose in utter freedom; much as it is on earth when liberty is subjected to no restraint.

(547.) This, although the largest society, shall after the Judgment cease to be a society; and although it would do so it shall nevertheless avail nothing against the least society of heaven; for these are most closely conjoined in mutual love, yea, bound together under the Divine love. But infernal souls are only united under their chief, unconnected by any mutual love, but rather disjoined in perpetual hatred, and besides separated by God the Unitor. So is the least handful of celestial souls able to put to flight a whole army of the impious; especially since these are afraid of themselves, and flee from the truth which they contemplate in themselves, and are therefore without any self-confidence. Hence one blessed

soul may put to flight many thousand souls of the unhappy.

(548.) Both the ancient philosophers, and physicists, and the pagan priests, by common consent have confirmed the doctrine of infernal sufferings. They have described their punishments, that of Tantalus and others, also Erebus, Styx, the Erinnyes, the Furies. Pythagoras, Plato, and others have thought still more regarding these subjects; for by the light of their nature they have seen that by no means can they be happy who have not in this life prepared for themselves a way through virtue to happiness.

XXXI.

CONCERNING THE DIVINE PROVIDENCE.

(549.) There is no one, I think, so insane as to deny that there is a certain supreme direction or Divine providence: for all things are full of Deity, and we admire in each and every thing the order which is attributed to nature and its perpetual preservation, not by itself, which would be absurd, but by some higher Being from whom it has existence and consequently subsistence. We see blended together a multitude of phenomena going to prove a regulating providence, as that all things seem to be for the sake of use or an end, especially that one end seems to exist on account of another, so that there may be a series of ends, from a certain first through intermediates to a last or [another] first. But for example: The earth itself exists that it may be inhabited by animated beings, the mineral kingdom that it may produce the vegetable, the vegetable that it may nourish and sustain the animal, the lower species of animals that they may serve the higher, and all that they may serve the human race; the atmospheres that we may be enclosed and held in by the body, and that we may breathe and talk: the ether with the sun that each being may exist, and also that we may see. But why mention more? There is not a worm, nor a plant, nor blade of grass without its use, namely, that it may serve as a means to a certain end: so that the visible world is a complex of means to an end beyond the world or beyond its own nature; for there is a progression of ends through natural effects, and thus through universal nature. That there is such a perpetual

relation and progress of ends, namely, that one is always for the sake of another, is to be held as attributable to a Divine providence; indeed, as indicating that God has so provided all particulars that they shall maintain this their order.

(550.) The universe, with each most particular thing in it, is the work of God alone, for nothing could flow from itself. What can exist without an origin? If the origin belong to nature itself, whence then is nature, unless you worship that as God? And if these are the works of God, it is necessary that He sustain them, for without perpetual sustentation all things would relapse into their primitive chaos. Thence He must be actually omnipresent, omniscient, omnipotent; and if omnipotent it follows that He provides for each and every thing in order that there may be ends intermediate to a further end. To rule and provide for a universe is the Divine itself and property of Divinity; nor has this need of counsel nor of care. For from itself and its own essence, wisdom, and love, all these things flow in their connection, order, and their genuine series.

(551.) If there is a universal providence of God there is also a particular one, for the universal never exists without particulars from which it is called universal. Of what quality is the universal can be judged from the particulars; thus from providence in most particular things may be judged what it is in the universal, nor would there be any universal unless it concerned itself with particulars; and this, indeed, in the case of providence, in order that all these may conspire to universal ends.

(552.) All providence regards an end, and it foresees means to an end; thence is the future embraced in the present, and the present is as the complex of the past. So is there a series of means to a certain end, which is the first in the mediates and in the ultimates. But of what nature is the Divine providence we may see much better from examples than from bare axioms.

- (553.) The end of creation, or the end on account of which the world was created, could be no other than the first and the last, or the most universal of all ends, and that which is perpetually reigning in the created universe, which is the complex of means conspiring to that end. No other end of creation can be given than that there may exist a universal society of souls, or a heaven, that is, the kingdom of God. That this was the end of creation may be proved by innumerable arguments; for it would be absurd to say that the world was created on account of the earth and terrestrial societies, and this miserable and perishable life; since all things on earth are for the sake of man, and all things in man for the sake of his soul, and the soul cannot be for no end. If, then, it exists for any end, it must be for a society in which God is present; for His providence regards souls which are spiritual, and His works are adapted to men and to their consociation.
- (554.) In order that a celestial society, or society of souls may exist, it is necessary that there be a most perfect form of government, namely, souls distinct among themselves, and every possible variety, which may be called harmonies between the souls; and so from such harmony there will arise a consensus and accord which shall produce that entire effect and end which is always foreseen and provided.
- (555.) Let there be this most universal end, which is at once the first, the all in the mediates, and the last, and thus the same as the first, and we shall see at once how the Divine providence reigns in foreseeing and dispensing the mediates. It may be said God might create such a society at once, without our earth and worldly things; that is, He might fill heaven with souls without any generation and multiplication in this earth. This, indeed, cannot be denied; all things to God are possible. But there are also innumerable things which are to Him impossible; for instance, to be imperfect, mortal, inconstant, wicked, unjust. This is repugnant to His nature;

and because such a society [as we have described], whose form is most perfect, can in no wise be given without every variety, even from the most perfect to the most imperfect, from the pure to the impure, from love to hatred: or because there are intermediates from given opposites. thus between the highest good or God and the greatest evil or the Devil: therefore from these premises it would follow that God, because He is perfection itself, wisdom. goodness, and love, could in no wise create immediately any devil nor any soul in whom evil or any guilt should reside; hence not man together with vice, crime, and sin, and hence not such a variety as is required for such a society as we have described. For whatever immediately flowed from God could not be otherwise than the best and the most perfect. But that the evil and the imperfect should have come into existence can be traced not immediately to God as a cause, but to the created subject itself in which it is a nature. Thus it is from the Devil himself that he arose against his God and became a rebel; it was from Adam that he did contrary to the Divine commandment, seeking how he might enjoy a higher and more perfect existence. It is clear from the Sacred Scriptures that the Divine providence did not lead Adam immediately to this evil, but that it permitted it; that it permitted the serpent; that it forbade to him the tree; that it created Adam free, and did not instruct him: that in the moment that he ate he was not checked and made to abstain, as was Abraham when he would sacrifice his son; beside many other things which clearly demonstrate that there was a providence that he should be able to sin, and a foreknowledge that he would sin, and lose his pristine integrity, and thus that this result should flow as from the very principle of his being, namely, that souls are to be distinguished one from another, and that every possible variety must exist between them; and so the end of creation or the kingdom of God be reached, whose seminaries are terrestrial societies, which likewise represent the heavenly society. For there is nothing given in this world which does not contain a representation of the future world.*

That this end may be obtained it is necessary that man shall be allowed a free will. The cause of variety of subjects arises solely from free exercise and liberty of the will. Without this there would be no intellect, no morality, no virtue, no vice, no crime, no guilt, no affection of the mind, or change of state. This is the reason why God has wished to preserve the free human will strong and inviolate, even for the doing of evil deeds; so that we would seem to be almost willing to deny a Divine providence for the same reason that we would affirm it. But the liberty allowed to human minds is not absolute, but limited. It is like a bird which the fowler holds bound by its foot or tied with a string, and which can move about to a certain distance; it is provided that it shall not go beyond this limit.

(556.) The means which restrict the free wills of men are numerous. There are, for instance, societies, and the forms of their government, laws, punishments of the body, judges, all things done in order that men shall not abuse their free will; there are consciences, and laws, and rights impressed on our minds, which are the most stringent bonds. There is religion or Divine worship, the fear of eternal punishments and condemnation, and the love and hope of happiness; this therefore may be called the bond of society and of societies. There is a certain fate which follows every one and abides with him continually, according to his crimes or his virtues. Concerning this we shall treat further on. There is especially the cause of fate, the influx of God Himself by His Spirit into souls, which nevertheless exist as contingently as if nothing was by provision or consultation.

(557.) Meanwhile, unless such means had been pro-

^{* &}quot;Alles vergängliche ist ein Gleichness" (Goethe). [Tr.

vided, and God Himself had been acting as the ruler and establisher of all, no human society whatever could have existed, where one always seeks the destruction of another and desires to despoil him of his goods, and when many esteem themselves higher than societies, and imagine that all things exist for themselves alone. Such a society, animated by a spirit destructive of society itself, nevertheless exists entire, and this could not be the case without a Divine providence.

- (558.) The very Divine providence itself principally reigns in distinguishing particulars from particulars, lest there should be given one state of mind absolutely like another. On this account liberty is granted. Marriages are said to be foreordained in heaven; marriages of parents and children, of brothers and sisters are wholly forbidden; schisms and controversies, as well of religion as of principles of economy, politics, philosophy, and physics, are tolerated and almost inspired; all differ in their principles, and thence in their mental dispositions, so that we say "many heads, many minds [animi]." Nature herself abhors every equality between one thing and another; for such would be one and the same, and there would be nothing distinct, and hence nothing natural.
- (559.) Providence reigns both particularly and universally in selecting and foreseeing those who are to attain to heavenly happiness; for the human race is the seminary itself [of heaven], and the City of God or the Church is scattered throughout the universal world, and from thence is the celestial society collected. Thus all those who are called the elect are ruled by a peculiar providence of God.
- (560.) This is the principal end, and these the means leading to that end; but there are still infinite means which in their essence as means pursue either mediately or immediately this series of ends, whether as pertaining to things mundane and corporeal or to things spiritual. In regard to things corporeal in order that the body may be cov-

ered or clothed, the whole globe furnishes the vestments, yea, even the worms do this; and as food is also necessary that man may live in the body, this is also provided. As for mundane affairs, there are the wealth and possessions necessary for civil existence, also the sciences, and innumerable other things. For the spiritual interests of man it is revealed of what nature heaven is, what the will is, how God is to be adored, and by what means the state of the soul is to be perfected so that it may be a member of heaven, and this in such manner that its liberty may not be injured, but that it may freely turn itself to God.

(561.) But concerning providence, fate, fortune, predestination, and human prudence, we have already treated; which passages see and add.*

^{*} Dr. Rudolph Tafel, in his Documents concerning Swedenborg, vol. ii., p. 932, offers the following satisfactory explanation of this paragraph: "A work bearing a somewhat similar title was announced by the author for publication in 1742, viz., 'Divine Prudence, Predestination, Fate, Fortune, and Human Prudence' (See Document 201, vol. i., p. 535). That Swedenborg really wrote a work bearing this title, appears from the last chapter of the present work, which is entitled Divine Providence, and where the author says at the close, 'Concerning providence, fate, fortune, predestination, and human prudence we have already treated; what has been said there may be seen and added here.' This work, however, has not been preserved among the author's MSS."

Dr. Im. Tafel, the editor of the Latin edition, adds the following references, which cannot be those which the author had in mind, as they include works written many years later. [Tr.

On the Divine Providence (see places cited in Spiritual Diary, part v. 2, pp. 209-213).

On Fate (the same, part v. 2, p. III; and Arcana Calestis, no. 6487).

On Fortune (the same, part v. 1, p. 340; and Arcana Cælestis, nos. 5049, 5179, 5508, 6484, 6493, 7007; Angelic Wisdom concerning the Divine Providence, nos. 212, 251; also the New Jerusalem and its Heavenly Doctrine, no. 276).

On Predestination (Arcana Cælestis, no. 6488; Divine Providence, nos. 329, 330; Summary Exposition of the Doctrine of the New Church, no. 66; True Christian Religion, nos. 72, 485-488, 628, 798, 803).

On Human Prudence (Spiritual Diary, part v. 2, p. 213; Arcana Cælestis, nos. 649, 5664, 6484, 6692, 7007, 8717; Divine Providence, nos. 197, 206, 208, 216, 235, 316, 321; Conjugial Love, no. 353; The New Jerusalem, no. 276).

XXXII.

THE UNIVERSAL MATHESIS, OR A MATHEMATICAL PHILOSOPHY OF UNIVERSALS.

(562.) The celebrated Locke, in his treatise on *The Human Understanding*, says:—

"The ideas which form the basis of morality being all real essences, and of such a nature that they sustain a mutual connection and adaptation which may be discovered, it follows that as soon as we discover these relations, we shall to that point be in possession of so many real, certain, and general truths; and I am sure that in following a good method one might bring a large part of moral science to such a degree of evidence and certitude, that an attentive and judicious man would no longer find in it any matter of doubt, more than he would in propositions of mathematics which have been demonstrated to him" (Book iv., ch. xii., section 8).

And elsewhere: "Perhaps, if one should consider distinctly and with all possible care the kind of science which proceeds upon the basis of ideas and words, this would produce a logic and a critique different from those hitherto seen" (Book iv., ch. xxi., section 4).

Again: "I do not doubt but that in the state and present constitution of our nature, human knowledge may be carried far beyond any point thus far attained, if men will undertake sincerely and with entire mental freedom to perfect the means of discovering the truth with the same application and the same industry which they employ in colouring and maintaining a falsity, in defending a sys-

tem of which they are declared partisans, or certain interests in which they are engaged" (Book iv., ch. iii., section 6).

Further: "The highest degree of our knowledge is intuition without reasoning;for this is certain knowledge secure from all doubt, having no need of proof and incapable of receiving it, because it is the highest point of all human certitude; such is that which the angels now possess and that which the spirits of the just made perfect will attain to in the life to come. It embraces a thousand things which at present escape entirely our understanding; our reason in its limited range of vision catching few gleams of them, the rest remaining veiled in darkness from our view" (Book iv., ch. xvii., section 14).

(563.) There is given a science of sciences, or a universal science, which contains all others in itself, and parts of which can as it were be resolved into these and those particular sciences. Such a science is not acquired by learning, but it is connate, especially in souls which are pure intelligences. Such is the science of souls released from the body, and of angels, who if they communicate their thoughts, or converse, seem to be unable to form any connection by words, which are all material ideas and forms, and which the mind understands as signs, knowing their meaning, and this from experience; but the soul from this its science contemplates all objects immediately as they are in themselves, thus whether good or evil, and according to their nature it assents or is averse. Unless the soul were furnished with such a science it would be wholly unable to flow into our thoughts, and to infuse as it were the power of understanding and of expressing higher things; as also it would be unable to adapt all its organic forms to the inmost and most secret laws of mechanics, physics, chemistry, and many other phenomena; therefore that such a science exists there can be no doubt.

(564.) For there are truths a priori, or propositions

which are at once acknowledged as true; nor is there need of any demonstrations a posteriori for proving them. nor of confirmation by experience, or by the senses. The truth itself presents itself naked, and as it were declares itself true. The mind is often indignant that such truths should have to be proved when they are above all demonstration. For all harmonies, and thus all order. naturally soothe and delight the organs of our senses, while disharmony constrains and wounds them. So it is with truths in which there is as it were an intellectual order. Wherefore if we were not overburdened with the fetters of sciences, with the turbulent desires of the lower mind, and similar hindrances, we should be able to know truths purely; since a certain consent shines forth as something harmonious and as from a sacred shrine, I know not where.

- (565.) But the reason of this is that higher forms contain in themselves all those things which can be contained in the lower forms, as a universal genus contains all the species; so that the higher form is the order itself and the principle of the following forms, thence also of all their forces, modes and qualities; and in themselves as of their very nature they perceive whatever agrees or disagrees with the form, and thence all that ever is given in the lower forms, if there is a connection therewith, such as that of the soul with the body by means of the organic forms.
- (566.) This science indeed may seem to be capable of being reduced to rule, but by what mode of reasoning can be perceived from those things which are immediately around the internal sensory; thus all ideas, both material and intellectual, are only mutations of the state of the sensory and of the intellectory; and these changes of state can be understood from a description of the forms, especially the circular and spiral. The soul perceives every such change, and knows what it signifies. The changes of state are universal and singular, common and particular, gen-

eral, special, and individual, and all these can be subjected to a certain algebraic calculation, and be reduced by rules to equations in the same manner as is customary in the calculus of infinites. In the mind itself also all things are reduced to their equations, in which those things are together present which before have been collected or have taken place successively. Those things which are in contact with the internal sensory can be raised to higher powers or elevated to higher degrees by their proper rules; and so changes of state still more universal exist, which contain, together and successively, infinitely more particulars corresponding to the truths themselves perceived by the soul from the changes of state.

(567.) Thus indeed it is possible to submit ideas of the mind to calculation; whence arises the universal mathesis. But it is not possible to deduce any certitude thence, unless there be a certitude proposed and acknowledged, from which equations are to be commenced. I would wish also to propose one other attempt; indeed I have ascertained its possibility; but there are many rules to be premised and data proposed and truths to be adjusted before I may approach this. And still we fall at length into a certain Gordian knot and equation, out of which greater labor is required to extricate ourselves than it is worth while to devote to it, and from the smallest fault in reckoning we are able to fall into many fallacies. On this account I forbear making the attempt, and in place of it I have desired to propose a certain Key of Natural and Spiritual Mysteries by the way of Correspondences and Representations, which more directly and certainly leads us into hidden truths;* and upon this doctrine, since it is as yet unknown to the world, I ought to dwell at somewhat greater length.

^{*} See the author's Hieroglyphic Key to Natural and Spiritual Mysteries by way of Representation, and Correspondences. Translated by Wilkinson, London, 1847.

APPENDIX I.

TWELVE THESES ON "THE HUMAN SOUL."

(From the "Economy of the Animal Kingdom," Part II.)

BY EMANUEL SWEDENBORG.

I.

From the anatomy of the animal body we clearly perceive that a certain most pure fluid glances through the subtlest fibres, remote from even the acutest sense; that it reigns universally in the whole and in every part of its own limited universe or body, and continues, irrigates, nourishes, actuates, modifies, forms, and renovates everything therein. This fluid is in the third degree above the blood, which it enters as the first, supreme, inmost, remotest, and most perfect substance and force of its body, as the sole and proper animal force, and as the determining principle of all things. Wherefore, if the soul of the body is to be the subject of inquiry, and the communication between the soul and the body to be investigated, we must first examine this fluid, and ascertain whether it agrees with our predicates. But as this fluid lies so deeply in nature, no thought can enter into it, except by the doctrine of series and degrees joined to experience; nor can it be described, except by recourse to a mathematical philosophy of universals.

11.

Yet this does not prevent us from perceiving, solely by the intuitive faculty of the mind, that such a fluid, although it be the first substance of the body, nevertheless derives its being from a still higher substance, and proximately from those things in the universe on which the principles of natural things are impressed by the Deity, and in which, at the same time, the most perfect forms of nature are involved. Hence it is that it is the form of forms in the body, and the formative substance, that draws the thread from the first living point, and continues it afterwards to the last point of life; and so connects one thing with another, and so conserves and governs it afterwards, that all things mutually follow each other, and the posterior refer themselves to the prior, and the whole with the parts, the universal with the singulars, by a wonderful subordination and co-ordination, refers itself to this prime form and substance, upon

which all things depend, and by which, and for which, each thing exists in its own distinctive manner.

III.

But as this most pure fluid, or supereminent blood, has acquired its form from the first substances of the world, it can by no means be said to live, much less to feel, perceive, understand, or regard ends; for nature, considered in itself, is dead, and only serves life as an instrumental cause; thus is altogether subject to the will of an intelligent being, who uses it to promote ends by effects. Hence we must look higher for its principle of life, and seek it from the First Esse or Deity of the universe, who is essential life and essential perfection of life or wisdom. Unless this First Esse were life and wisdom nothing whatever in nature could live, much less have wisdom: nor yet be capable of motion.

IV.

This life and intelligence flow with vivifying virtue into no substances but those that are accommodated at once to the beginning of motion, and to the reception of life; consequently into the most simple, universal, and perfect substances of the animal body; that is, into its purest fluid; and through this medium into the less simple, universal, and perfect substances, or into the posterior and compound; all of which manifest the force and lead the life of their first substance, according to their degree of composition, and according to their form, which makes them such as we find them to be. On account of the influx of this life, which is the principal cause in the animate kingdom, this purest fluid, which is the instrumental cause, is to be called the spirit and soul of its body.

v.

But to know the manner in which this life and wisdom flow in, is infinitely above the sphere of the human mind; there is no analysis and no abstraction that can reach so high; for whatever is in God, and whatever law God acts by, is God. The only representation we can have of it is in the way of comparison with light. For as the sun is the fountain of light and the distinctions thereof in its universe, so the Deity is the sun of life and of all wisdom. As the sun of the world flows in only one manner, and without unition, into the subjects and objects of its universe, so also does the sun of life and of wisdom. As the sun of the world flows in by mediating auras, so the sun of life and of wisdom flow in by the mediation of His spirit. But as the sun of the world flows into subjects and objects according to the modified character of each, so also does the sun of life and of wisdom. But we are not at liberty to go further than this into the details of the comparison, inasmuch as the one sun is

within nature, the other is above it; the one is physical, the other is purely moral; and the one falls under the philosophy of the mind, while the other lies withdrawn among the sacred mysteries of theology, between which two there are boundaries that it is impossible for human faculties to transcend. Furthermore, by the omnipresence and universal influx of this life into created matters, all things flow constantly in a provident order from an end, through ends, to an end.

VI.

There are, then, two distinct principles that determine this spirituous fluid assumed as the soul; the one natural, by which it is enabled to exist and be moved in the world; the other spiritual, by which it is enabled to live and be wise; of these a third, as properly its own, is compounded, namely, the principle of determining itself into acts suitable to the ends of the universe. But this principle of self-determination regards the ultimate world, or the earth, where the determination takes place; and hence the soul thus emprincipled must descend by as many degrees as distinguish the substances and forces of the world; and by consequence form a body adequate to each degree in succession. There are, then, sensory and motory organs; both of which are distributed into four degrees. The first of the organs is the spirituous fluid or soul, whose office it is to represent the universe, to have intuition of ends, to be conscious, and principally to determine. The next organ under the soul is the mind, whose office it is to understand, to think, and to will. The third in order is the animus, whose office it is to conceive, to imagine, and to desire. The fourth or last is constituted of the organs of the five external senses, namely, sight, hearing, smell, taste, and touch. So also the motory organs, of which the muscles are the last. These and the sensory organs constitute the body, whose office it is to feel, to form looks and actions, to be disposed, and to do what the higher lives determine, will, and desire. Although there are this number of degrees, yet the animal system consists of nothing but the soul and the body; for the intermediate organisms are only determinations of the soul, of which, as well as of the body, they partake. Such now is the ladder by which every operation and affection of the soul and body descends and ascends.

The spirituous fluid is the first of the organs, or the supereminent organ, in its animal body. And as it is the soul, it is seated so high above all the other faculties, that it is their order, truth, rule, law, science, art. Consequently its office is to represent the universe; to have intuition of ends; to be conscious of all things; principally to determine. It is a faculty distinct from the intellectual mind, prior and superior to, and more universal and more perfect than. the latter. And it flows into the intellectual mind much after the manner of light. Consequently a notion of it can hardly be procured

while we live in the body.

VII.

The genuine progression in descending and ascending appears to be in this wise. As the forms of the modulations or sounds of the air in the ear are to the forms of the modifications or images of the ether in the eye, or in the animus, so are the latter to the forms of the superior modifications in the mind, which forms are termed intellectual and rational ideas, in so far as they are illuminated by the light of the soul; and so again are these forms of the mind to similar supreme forms, inexpressible by words, in the soul, which forms are termed intuitive ideas of ends, in so far as they are illuminated by the life of the first cause.

VIII.

The soul, from the very initial stages of conception, which it derives in the first instance from its parent, is born accommodated at once to the beginning of motion and to the reception of life; consequently to all its intuition and intelligence, and it takes this intuition and intelligence with it, from the first stamen and the earliest infancy to the most extreme old age. But not so the mind, which before it can be illuminated by the light of the soul, must be imbued with principles a posteriori, or through the organs of the external senses, by the mediation of the animus. Thus as the mind is instructed, or the way opened, so it is enabled to communicate with its soul, which has determined and provided that the way leading to it should be opened in this order. Hence it follows that there are no innate ideas or imprinted laws in the human mind, but only in the soul; in which unless ideas and laws were connate, there could be no memory of the things perceived by the senses, and no understanding; and no animal could exist and subsist as an organic subject participant of life.

IX.

From the foregoing considerations we may infer the nature of the intercourse between the soul and the body; for those things that are superior flow into those that are inferior, according to the order, and suitably to the mode, in which the substances are formed, and in which they communicate, by their connections, with each other. If the operation of the spirituous fluid be the soul; and if the operation of the soul in the organic cortical substance be the mind; and if the affection of the entire brain, or common sensorium, be the animus; and if the faculty of feeling be in the sensory organs; and the faculty of acting in the motory organs of the body; then a diligent and rational anatomical inquiry must show the nature of the above intercourse, and must prove that the soul can communicate with the body, but through mediating organs, and indeed according to the natural and acquired state of such organs.

x.

The spirituous fluid is thoroughly adapted and ready to take upon it infinite variety, and to undergo infinite changes of state; hence it is in the most perfect harmonic variety, both with respect to the parts in its system, and with respect to different systems relatively to each other. By means of this variety the soul is enabled to know everything whatever that happens without and within the body, and that comes in contact with the body; and to apply its force to those things that occur within, and to give its consent to those things that occur without. Thus we may understand what free choice is, namely, that the mind has the power to elect whatever it desires in a thought directed to one end; hence to determine the body to act, whether according to what the animus wishes, or whether the contrary; but in those matters only in which the mind has been instructed by way of the organs; in which it views the honourable, the useful, or the decorous as an end. But in higher and divine things, the mind can will the means, but in respect to the end it must permit itself to be acted upon by the soul, and the soul by the spirit of God. Meanwhile, this free power of doing, or leaving undone, is granted to human minds as a means to the ultimate end of creation, which is the glory of God.

XI.

But not so in brute animals; for their purest fluid receives its form from the ether of the second order, not in a higher degree than, but in the same degree as, their organism, which corresponds to that of our mind: and in consequence of this circumstance, they are born to communication between the soul and the body, or to all the conditions of their life; and are carried, suitably to the order of nature, into ends that they themselves are ignorant of.

XII.

On these premises it may be demonstrated to intellectual belief, that the human spirituous fluid is absolutely safe from harm by aught that befalls in the sublunary region; and that it is indestructible, and remains immortal, although not immortal per se, after the death of the body. That when emancipated from the bonds and trammels of earthly things, it will still assume the exact form of the human body, and live a life pure beyond imagination. Furthermore, that not the smallest deed is done designedly in the life of the body, and not the least word uttered by consent of the will, but shall then appear in the bright light of an inherent wisdom, before the tribunal of its conscience. Lastly, that there is a society of souls in the heavens, and that the City of God upon earth is the seminary of this society, in which, and by which, the end of ends is regarded.

APPENDIX II.

AN ABSTRACT* OF THE "EPILOGUE ON THE SENSES OR SENSATION IN GENERAL."

(Translated from Part IV. of the "Animal Kingdom," as edited, in Latin, by Dr. J. F. Im. Tafel, Tubingen and London, 1848.)

A.

SENSATION IN GENERAL.

These general principles are to be observed regarding all sensation:—

- The origin of every sensation is from an external touch or impulse.
- 2. The touch or impulse is upon the fibres or little tunics of the fibres, and thus external.
- 3. Therefore the fibres must be so organically disposed and formed that they may receive in a distinct manner all the differences belonging to the various kinds of touch.
- 4. The sensations of touch, taste, and smell arise from the touch or impulse of heavy bodies, or of the inertia of forces, that is, of parts.
- 5. But the senses of hearing and sight arise from the touch or impulse of bodies not heavy, but of active forces, that is, of parts of the atmosphere.
- 6. That sensation may become evident and cause affection there must be many differences together in the same touch, and thus a kind of form made up of differences.
- 7. The differences of this form will be simultaneous or successive.
- 8. The form arising from the successive differences will put on the same quality as the form of the simultaneous differences.
- The organico-sensory forms are formed so as to receive in a distinct manner the forms of all these differences.

^{*} An outline merely is given, chiefly by stating the theses or propositions which the author discusses at length. [Tr.

Especially are we to observe that:-

- The organic forms of each sensory apply immediately to it these simultaneous and successive varieties of differences.
- II. They communicate these to the fibres from which they are composed.
- 12. These fibres, by a kind of modification or tremulation, after the analogy of strings, according to the antecedents carry [these differences] up to their origins or to the cortical substances.
- 13. This is done perfectly by virtue of the spiritual essence which is in the fibre.
- 14. And according to the nature of the modification and trembling, these differences are carried to every contiguous fibre, and to every cortical substance of the cerebrum and the cerebellum, also of the medulla oblongata and medulla spinalis.
- 15. By the living essence which is in the spirit and in the fibres this modification becomes sensation, the change of state gives an affection according to the form of the modification, and so on.
- 16. The soul itself, which alone lives in the body, gives the ability to feel the qualities of these modifications.
- 17. According to the affections arise the changes of state in the organs.
- 18. This modification of the fibres spreads out according to every form of modification in the very beginnings or the cortical substances; for these beginnings were formed according to this very nature.
- 19. Therefore as many differences and varieties as are in the touch and between the various touches, so many different changes of state are undergone, for the perfection [of these cortical substances] consist in this.
- 20. From the form of the differences and of the modifications of the changes of state thence arising, the affections are produced; that is, pleasant ones if the changes of state agree with the natural state, unpleasant if they disagree.
- 21. Hence every touch or mode which is represented in the sense as a unit, whether successive or simultaneous varieties enter into it, is either pleasant or unpleasant.
- 22. Likewise with the units or modes among themselves, their harmonies produce a common affection.
- 23. The senses differ in degree; the most composite is the touch; among the external senses the most simple is the sight. [The doctrine of Degrees is here illustrated at some length. Tr.]
- 24. Thence they differ in the perfection of all their qualities.
- 25. This difference is entirely according to the object which touch, impel, strike and affect the organ.
- 26. The organic forms of each sensory are brought into agreement according to these degrees.
- 27. According to the same degrees the fibres themselves are composed from which are made the organic forms.

- According to the same degrees the modifications run through the fibres.
- 29. According to the same degrees changes are experienced in the common sensory or cerebrum.
- According to the same degrees also affections [are produced] in the cerebrum, that is, according to changes and their harmonies or disharmonies.
- 31. This, therefore, is the cause of the diversity of the five senses.
- 32. The organic forms determine these things in each external sensory.
- 33. Each sense has its own common or general sense to which the modes or units refer themselves as parts.*
- 34. These common [senses] differ among themselves as do the series of parts or modes.
- 35. Hence exist the parts or unities properly distinguished among themselves, and they tend towards an evident perfection. Therefore every sensation has its superior and inferior degrees, and indeed three, the particular, the general, and the most general; for every where there is order and degrees of order that there may be a series and correspondences.
- 36. Every sense of whatever degree has its greatest and its least, and its least refers to its greater and greatest. These degrees are to be treated of in their especial doctrine, to be called that of Society and Series.
- 37. All ideas arise from sensations of sight.
- 38. The hearing regarded in itself does not produce any ideas, but only refers them to visual ideas.
- 39. The modes of hearing seem to be able to affect the imagination.
- 40. All harmony of posteriors with priors, or of inferiors with superiors, is not pre-established but co-established.
- 41. There is something in the forms of the inferior modes, sensation and their ideas which naturally affects those which are superior.
- 42. These things can only be understood by means of new doctrines, namely, those of Forms, of Order, and Degrees, of Influx, of Correspondences, of Modifications.
- 43. It is ideas which form truths, and the form itself of the truth or rather of the truths give [the sense of] goodness; hence the affections.
- 44. Truths, because they are forms, produce affections, either by means of mere harmony or on account of a love which is put for the end.
- 45. Animals better recognize the harmonies of things arising from their senses [than man], for these things correspond harmoniously to them.

^{*} Compare Aristotle, De Anima, chap. viii., cited in Appendix III., p. 377.

B.

CONCERNING TRUTHS.

- 1. All sensations are forms either harmonious or discordant.
- 2. It is the same with imaginative sensation.
- 3. All varieties above these or belonging to the intellect are not natural, but are acquired by learning or art.
- 4. There are nevertheless intellectual truths which produce effect naturally.
- 5. These truths, undoubted, are only parts from which higher truths are to be concluded.
- 6. Such therefore as is the love, and the more powerfully it reigns, such is the affection thence arising.
- 7. Inferior loves naturally combat against superior ones.
- 8. Thus the more the lower loves recede the more the higher ones can flow in.
- 9. In a word, intellectual truths result either from the lower or corporeal affections or from the spiritual or higher affections. For the intellect is the center of these.
- 10. The intellectual viewed in itself is only the supremely sensitive [organ].

C.

CONCERNING THE AFFECTIONS.

- 1. There is natural affection and spiritual affection.
- 2. There is a mixed affection which partakes of the natural and the spiritual.
- 3. Natural affection is divided into sensitive, imaginative and intellectual; or what is the same thing, into corporeal or material which is of the external senses, or the face; the physical which is of the imagination or the animus; and the philosophical which is of the intellect or the mind.
- 4. Sensitive affection has regard to merely the figures of objects, hence to their common and particular qualities.
- 5. The imagination or physical affection, like the visual, has regard to images and ideas, which it disposes into a new order, hence the affection of harmony.
- 6. The intellectual or philosophic affection regards immaterial or highly elevated ideas.
- 7. All these natural affections, because harmonious, presuppose some geometric and analytic elements and principles.
- 8. The philosophic affection is the inmost sensation which is called the intellect.
- 9. The lower affections flow into the higher, the higher into the

lower, but with much difference. Hence comes the common sense.

10. This is the faculty of thinking and of judging.

II. The faculty next below feels according to the state put on by the intellectual faculty.

12. Spiritual affection.

D.

A GENERAL EXPOSITION REGARDING SENSATION AND AFFECTION.*

 Sensation produces affection: affection is of good or of evil. Affection of good is love, of evil, hate. The love of good involves harmony; harmony conjunction. Therefore good and

evil are the beginnings of all affections.

- 2. The external senses know good and evil by affections; the imagination by reproduction and a new production from the memory, and from this inmost memory or that of the intellect, which by its faculty of evoking ideas and analytically forming them explores truths and the qualities of truth, especially the inmost or those of the intellect, whether the good be a true or false good and the evil be truly or falsely evil. In or under the knowledge itself of truth lies hidden the good or the evil by which the sensation is affected. And this is affected according to the natural and the acquired order, in which is the organism of life itself.
- 3. What is truly good and what truly evil is known especially from the love which is in the affection of the sensations. The lowest love is that of the world; the love next higher and the principal cause of that love is the love of the body; still higher is the love of self and ambition; above this is the love of society, which increases in its degrees according to its quality, or its natural, moral, and spiritual bonds, and according to its quantity or universality. Still superior to this is the love of a heavenly society; and supreme is the love of God.

4. That loves thus ascend follows from this induction: Our bodies are not for the sake of the world; the internal faculties of the body whence is the love of self is not for the sake of the body; human societies are not for our sake, heavenly society is not for the sake of the earthly, but just the contrary. Thus neither does God exist for the sake of a heavenly society, but this for the sake of His glory.

Thus a true and pure love and the true and highest good is God from whom as from their source flow all love, hence all af-

fection of good, felicity, harmony, conjunction.

^{*} Compare Aristotle, De Anima, Bk. iii. chap.viii., as quoted in Appendix III., p. 377.

- 6. Hence such as is the love such is the understanding of truth and thence flows truth as from its fount.
- 7. Thus also all intelligence of truth descends. As God is goodness itself so is He truth itself. He is the true Good and the good True, which is one. Higher goodness and truth flow into the lower, but not the reverse. In lower things there is no goodness and no truth which is not received from a higher. We receive nothing of good and of truth from above except as we remove the impediments and the inferior loves. Then it flows in by Grace, and not by our merit. For we cannot even remove the lower loves without a higher power, that is by its equilibrium and thence its presence; then by those contingencies which promote or impede [our loves], and thus by Providence. Therefore there is nothing except what is of Grace.

These things you will see proved, yea, demonstrated in our psychological writings; I dare say *demonstrated*, for I know I can demonstrate them, yea, even to the faith of the unbelieving.

E.

From the "Rules of Harmony or of Music."*

Gravity and acuteness of sounds proceed from four causes.
 (i.) The length of the fibre or string; (ii.) its tension or relaxation; (iii.) its thickness or multiplication; (iv.) its solidity and the specific gravity thence arising.

2. All these are present in the ear and in infinite variety.

3. A similar rule holds in simultaneous or consonant, as in successive or concordant sounds.

4. Modifications and sounds have a concordance between their intervals according to a coincidence of vibrations, and so an application of one sound to another.

5. This causes a pleasant variety, because there are oppositions

which quickly and truly coincide.

 All modifications of one sense traverse in the same time or the same velocity the fibres of the nerves, of whatever interval they be. Thus the general modifications in the same time as the particular ones.

Thus the sensory fibres, and others connected, as the connection is broken by the least moment of disharmony, become dissonant

in the brain.

^{*} I have introduced this portion of this work (the outline merely) because it affords a striking example of the Author's mode of reasoning by series from natural to spiritual or mental laws, thus from the laws of physical to laws of mental harmony. [Tr.

8. There is also an agreement or harmony of quantities.

9. That it may be understood how sounds or harmonic modes or concords coincide we will demonstrate this by drawings. [The author here refers to figures at the end of the work, and a demonstration of the figures follows. Tr.]

to. Hence follow these common rules:—(i.) The more consonant the sounds are, or the more they accord, the more frequent is the coincidence [of intervals] in the same time and space, according to the well known rule in musical theory, etc., etc. [Many rules here follow. Tr.]

11. The quantities of sounds express affections.

12. The changes of state in the brain, and especially in the cortical substance, take place in a similar manner.

13. Hence it follows that in the cortical substances of the brain similar rules come to our notice as in the modifications of the corresponding atmospheres.

14. And that changes of state in the substances of the brain observe the same harmonic laws as do the fibres of which we have treated.

- 15.But perpetual collisions and conflicts will arise, and thus innumerable other determinations and many contrary ones, although this common form and action still continues. Hence will arise perverse states even to the inmost, although in the beginning the battle is between the exterior and the interior modifications or changes. If the exterior conquers, the state of the interior is perverted; if the interior, then it celebrates its triumphs, and as it were mortifies and extinguishes the exterior states; and so it asserts its liberty.
- 16. From these things it is apparent how the interior man fights with the exterior in the rational mind.

17. Articulate sounds in the interior sensory are called ideas, and they are either sensual, imaginative, or intellectual.

18. These same ideas are mere changes of state in the organic or cortical substances.

19. These changes of state are impressed in the same way as the ideas of the memory.

20. Therefore the memory is a field which is made up of the external and internal senses.

F.

CONCLUSION CONCERNING THE INTELLECT AND ITS OPERATION.

The intellect with its faculties, or the rational mind, is granted the human race in order that we may explore truths, or rationally draw forth universals from singulars and generals from particulars, hence causes from their effects or priors from posteriors, genera from their species and species from individuals; thus also varieties from differences and hence qualities, accedents, modes from essences, and from the nature of their operations; then also in continued series greatest from lesser, lesser from least, and so quantities; the simultaneous from the successive, the present from the past, and contingents from both; these things first in analytic and afterward in the inverted or synthetic order; after the manner of a rational analysis and of logic, also of a geometrical or specious analysis, the former of these carrying its reasons to conclusions, the latter to equations; then in turn it resolves both conclusions and equations, and determines these to consequent ends.

Thus the truths into which so many simpler truths as essential determinations enter are brought forth like analytic forms. By means of these our mind brings itself to the knowledge of good and of evil, both natural and moral, and at length spiritual. And these things are provided to the end that we may know how to choose the best; thence also to inquire after, to judge, and select the mediate ends which lead to that ultimate or best, and to its possession and

fruition. And this is the work of science and of wisdom.

So far as we are affected with the love of the truly good, and especially of the supreme and best, so far are we united to the same, and so far is the state of our mind and soul rendered happier and

more perfect.

From these things it follows that the primary end of the intellect given us is that we may rise by degrees from a natural into a moral, and from a moral into a spiritual life; so at length into heavenly felicity, which shall be the continuation of the spiritual life.

APPENDIX III.

EXTRACTS FROM THE PSYCHOLOGICAL TREATISES OF ARISTOTLE.*

A.

FROM BOOK I., CHAPTER I.

"The soul is the principle of animals."

"Animated things possess motion and sensation."

The remainder of Book I. is occupied with a discussion of the various

ANCIENT DEFINITIONS OF SOUL.

Democritus: "A certain fire and heat."

"The spherical atoms are fire and soul."

"The soul imparts motion."

Pythagoras: "The soul is composed of motes in the air."

"The soul is what moves these."

Anaxagoras: "The soul is that which moves."

Empedocles: "It is composed of all the elements, and each of these is soul."

Plato, in the Timaeus, describes the soul as being produced by the elements.

Aristotle, in the Philosophy:—"Animal is from the idea of the One."

"The first length and breadth and depth."

"Intellect is unity, Science is two, Opinion is a number of surfaces."

"Sense is the number of a solid."

"Numbers are said to be the forms of things and the principles of beings, for they consist of elements."

Zenocrates: "The soul is number moving itself."

^{*} The Treatises of Aristotle: translated from the Greek (with Copious Elucidations from the Commentaries of Simplicius on the First Three of these Treatises), by Thomas Taylor; London, printed for the translator by Robert Wilks, 89 Chauncey Lane, 1808.

Anaxagoras: "Soul and Intellect are different. Intellect is especially the principle of all being, the only thing simple, unmingled, pure."

Diogenes: "The soul is air."

Heraclitus: "A principle, an exhalation, from which other things consist."

"Most incorporeal and always flowing."

Alcmaeon: "Immortal being always moved."

Hippo: "The soul is water. The generative seed."

Critias: "The soul is blood. Sensation is present with the soul by the nature of blood."

"All agree in defining the soul by three things, motion, sense, and

its being incorporeal."

"Those who define it by knowledge make it an element or from elements." Thus they say, "The similar is known by the similar; as the soul knows all things, it is composed of all principles."

CHAPTER III.

"If the soul moves it will have place."

"The soul if moved is moved by sensibles."

"The soul appears to move the body through a certain preelection and intelligence."

"In consequence of the communion of the body with the soul, the one acts, the other suffers; one is moved, the other moves."

CHAPTER IV.

Another opinion is that,-

"The soul is a certain harmony."

"Harmony is a certain mixture and composition of contraries."

"But the soul cannot be one of things mingled."

"Harmony does not move, as does the soul."

"The soul cannot be moved according to place, except as in subjects which are moved."

CHAPTER V.

ARE AFFECTIONS MOTIONS-JOY, FEAR, ETC.?

"To say that the soul is angry is just as if some one should say that the soul weaves or builds."

"It is better, perhaps, not to say that the soul communicates, or learns, or reasons dianoetically, but that man does these through the soul; and this not as if nature were in the soul, but sometimes as far as to, and sometimes from, the soul. Thus, for instance, sense

is from particular things, but reminiscence is from the soul to the motions or permanencies, which are the instruments of the senses. Intellect, however, appears to be ingenerated, being a certain essence free from corruption."

"To reason dianoetically, and to love and hate, are not passions of the intellect, but of this thing which contains intellect, so far as

it contains it."

"It is evident that the soul is not moved, not even by itself."

CHAPTER VI.

"Is 'to know' to be affected by similars, and does the soul 'know' things by being similar to things? How does it know the collected whole or God?"

"Divinity then is most unwise, for He knows not *strife* which all men know; but mortals will know all, because each is composed of all."

"We know by contrariety, for by the straight we know both the straight and the crooked, since a measuring rule is the judge of both; but the crooked is neither a judge of itself nor of the straight."

CHAPTER IX.

"The body does not connect the [parts of the] soul; but the soul connects the body; hence when the soul departs the body is dissipated."

BOOK II., CHAPTER I.

WHAT IS THE SOUL, AND WHAT IS ITS COMMON DEFINITION?

"The soul is an essence or the form of a natural body possessing life in capacity. This essence is *entelecheia*. It is the *entelecheia* of such a body; this is predicated in a twofold respect; partly as science, partly as contemplation. The soul is as science. Owing to the inherence of soul there is sleep and wakefulness; but wakefulness is analogous to actual contemplation, and sleep to the potency, without the energy. In the same thing, however, science is prior in generation."

Hence,

The soul is the first *entelecheia* of a natural body possessing life in capacity [potentiality]; but such a body is that which is organic. It is therefore

"The first entelecheia of a natural organic body."

"As the eye is pupil and sight, so is the animal soul and body."
"The soul is not separable from the body, being the entelecheia

of some of the parts; but still some parts of the soul not entelecheias of any body may be separated."

CHAPTER II.

"Animals are living things which have sense."

"The intellect appears to be another genus of soul, and it seems that this alone can be separated in the same manner as the perpetual from the corruptible. But with respect to the other parts of

the soul it is evident they are not separable, as some say."

"Essence is predicated in a threefold aspect: form, matter, and the composition of the two. Matter is the potentiality, form is the entelecheia (actuality). That which consists of both is animated; but the body is not the entelecheia of the soul, but the soul of a certain body. Hence those conceive well who are of opinion that the soul is neither without body, nor is a certain body; for it is not body, but some thing pertaining to body."

"The soul is the entelecheia, the reason of that which has the capacity of being such a particular thing" (or the reason why a thing has the potency of being a particular thing instead of something

else. Ed.).

CHAPTER III.

THE POWERS OF THE SOUL.

These are:-

Nutritive, sensitive, orectic, locomotive (according to place) and dianoetic.

Plants have nutritive power; some nutritive and sensitive. If sensitive also orectic; for orexis or appetite is desire, anger, and will

Animals: all have sense of touch and thus are sensitive.

Touch is the sense of aliments [taste]. Touch is the sense of dry and moist, of hot and cold.

Hunger is the desire of hot and dry; thirst of the moist and

cold.

Animals have also the locomotive powers.

Man: "Men are possessed of the dianoetic power and intellect. No sense is present without touch, but touch may be without other senses."

"Sensitive animals possess in the slightest manner reasoning and the dianoetic power."

CHAPTER IV.

NUTRITIVE AND GENERATIVE POWERS OF THE SOUL.

"Since corruptible things cannot remain one and the same in

number, and hence are not capable of eternity, in unceasing continuity, therefore that the animal and plant may participate in eternity and divinity they naturally aspire each to make another being such as itself: so it remains not itself but such as itself; not one in number, but in species."

"In nourishing there are three things, viz.:-

That which is nourished;
That which nourishes;
That by which it nourishes.
The first is the body;
The second is the soul;
The third is the nutriment."

"But since it is just to denominate all things by the end, and the end is to generate an offspring resembling that which generates, the first soul will be generative of that which resembles itself."

"Nothing generates itself, but preserves itself."

CHAPTER V.

WHAT IS SENSE IN GENERAL?

"Sense happens in consequence of something being moved and suffering, for it appears to be a certain change in quality."

"Sensitive power is not in actuality but in potentiality; it does

not perceive itself."

"Sense in energy is sense of particulars; science pertains to universals, and these are, in a certain respect, in the soul. Hence we may energize intellectually whenever we please; but it is not in our powers so to perceive sensibly; for this, a sensible object must be present."

"The sensitive power suffers, not being similar; but having suf-

fered it becomes similar, and is such as the sensible object."

CHAPTER VI.

EACH SENSE DISCUSSED.

"I. Sensibles are predicated as threefold:

Two are perceived essentially,
One accidentally.
One is peculiar to each sense.
One is common to all senses.
Colour is the peculiar object of sight.
Sound is the peculiar object of hearing.
Sapor is the peculiar object of taste.

Each sense forms a judgment of these sensibles. These are the peculiar sensibles.

But the common sensibles are: -motion, rest, number, figure,

magnitude.

"Sense suffers nothing as such from the sensibles, but from the peculiarities of sensibles; but of the things essentially sensible the peculiarities are properly sensibles, and are the things to which the essence of every sense is naturally referred."

CHAPTER VII.

THE SENSE OF SIGHT.

"Light is neither fire, nor, in short, a body, nor the effluxion of any body; but it is the presence of fire or something of this kind in that which is diaphanous; for it is impossible that two bodies can

be at one and the same time in the same place."

"Colour moves that which is diaphanous, e. g., the air; and by this which is continued, the instrument of sensation or the sensorium is moved. It is impossible that it should be passively affected by the colour which is seen; it must be therefore by that which is intermediate; hence there must be an intermediate; and if there were a vacuum we should not only not see accurately, but nothing would be seen. The same is true of sound and colour; for neither of these by touching the sensorium produces sensation; but by odour and sound, that which is intermediate is moved, and from this each sensorium. Where one places immediately on the sensorium that which sounds or smells he will produce no sensation."

"The intermediate in respect to sound is air: with odour it is anonymous; for there is a certain common passive quality in air and water. As the diaphanous is to colour, so is that intermediate nature in air and water to odour; for aquatic animals also appear to have a sense of odour, but man and such terrestrial animals as

respire are incapable of smelling without respiration."

CHAPTER VIII.

SOUND AND HEARING.

"Not every sound of an animal is a voice [word], for it is possible to produce sound with the tongue as in coughing; but it is necessary that the thing which strikes should be animated, and accompanied with a certain phantasy; since voice [word] is a certain sound significant, and is not the sound of respired air, like a cough."

CHAPTER IX.

SMELL.

"Inferior in man to its quality in the animal. Odours not being very manifest we borrow appellations from taste, as sweet, acrid, etc. Man smells only in respiring; in expiring or holding breath he

does not smell, even if the object of smell be placed in the nostrils. It is peculiar to man that the object of sensation is not perceived without respiration.*

The organ of smell has a covering as well as the eye; in those receiving the air it has a covering which when they respire is uncovered, the veins and pores being dilated."

CHAPTER X.

TASTE.

"That which is gustable is tangible, it is not sensible through an intermediate body. Nothing but moisture produces the sense of sapor, and sapor is the gustable."

CHAPTER XI.

THE TOUCH: AND THE TANGIBLE.

"Sense placed in the sensorium does not perceive, but perceives when placed in the flesh: hence flesh is the medium of the touch."

CHAPTER XII.

THE SENSES GENERALLY.

"Sense is that which is receptive of sensible forms without matter. Example: the wax receiving impression of the seal without the seal itself."

That which perceives will be a certain magnitude; but neither the essence of the sensitive power nor sense is magnitude but it is a certain reason and power of it.

BOOK III., CHAPTER III.

THE FIVE SENSES.

"To perceive sensibly is not the same with intellectual perception; for the perception of sense is always true of its object, and is present with all animals, but it is possible to perceive falsely by the dianoetic energy, and this power is present with only the animals having reason. The phantasy is different from both sense and the dianoetic power; the phantasy does not exist without sense, and hypolepsis (opinion) is not without phantasy; but phantasy and opinion (hypolepsis) are not the same: phantasy is in our power; we can imagine objects and form images; it is not in our power to opine when we please, since it is necessary to opine falsely or truly. In opining something atrocious we are co-passive (sympathetic); in phantasy we are affected only as on looking at a dreadful picture."

Hypolepsis embraces: science, opinion, prudence, and their contraries.*

CHAPTER IV.

PHANTASY AND HYPOLEPSIS.

"Intellectual perception, differing from sensible perception, em-

braces both phantasy and hypolepsis."

Phantasy is not sense: [it sees its vision as in sleep, without sense]. Sense is always present, but not phantasy. Animals have sense but not phantasy. Senses are always true; phantasies are mostly false. Opinion, neither with sense nor through sense, nor the conjunction of opinion and sense, will be phantasy.

Opinion is not of a certain other thing, but of that of which

sense is the perception.

The connection, from opinion and sense, of that which is white (for example), is the phantasy.

CHAPTER V.

INTELLECTUAL PERCEPTION, HOW IT IS PRODUCED.

"Intellect of soul is only intellect in potentiality, its only nature

is that it is possible."

"Intellect of soul (I mean the intellect by which the soul energizes dianoetically and hypoleptically) is nothing in energy of beings, before it intellectually perceives them. It is not reasonable that it should be mingled with body, for thus it would become a thing with a certain quality, would be hot or cold, would have an organ in the manner of a sensitive power. Now there is no organ of it. They speak properly who say the soul is the place of forms; that is not true of the whole soul, but of that which is intellective; nor is its form in *entelecheia*, but in capacity."

"The impassiveness of the sensitive and of the intellective power is not similar, for sense cannot perceive from a vehement sensible object; but intellect, when it understands any thing very intelligible, does not the less understand inferior concerns, but even understands them in a greater degree, for the sensitive power is not without body,

but intellect is separate [from body]."

"By the sensitive power it distinguishes the hot and the cold and those things of which flesh is a certain reason; but by another power either separate or on an inflected line subsisting with reference to itself as extended, it distinguishes the essence of flesh. The very nature of the thing (if the essence of the straight is different from the straight thing) it distinguishes by another power; it judges therefore by another power, or by a power subsisting in a different man-

^{*} Compare Swedenborg's description of the Mixed Intellect, nos. 32, 136. [Tr.

ner. In short, as are the things which are separate from matter, so also are the things pertaining to the intellect.

Some one may doubt:

"If intellect is simple and impassive and has nothing in common with anything, as Anaxagoras says, how it can perceive intellectually, if to perceive intellectually is to suffer something; for so far as something is common to both, the one appears to act, but the other to suffer. Again, it may be doubted whether intellect is itself intelligible. For either intellect will be present with other things (if it is not intelligible according to another thing, but is one certain thing in species by itself); or it will have something mingled which will make it to be intelligible in the same manner as other things. Or shall we say that [the ability] to suffer subsists according to something common? On which account it was before observed that intellect is in potency, in a certain respect all intelligibles, but is no one of these in *entelecheia* [actually] before it understands or perceives intellectually."

"But it is necessary to conceive of it as of a table in which nothing is written in *entelecheia* [actuality]; which happens to be the case in intellect. It likewise is intelligible in the same manner as intelligibles. For in things which are without matter, intellect and that which the intellect understands are the same. For theoretic science and the object of scientific knowledge are the same. The cause, however, why it does not always perceive intellectually, must be considered. But in those things which have matter, each of the intelligibles resides only potentially. Hence intellect will not be present with them, for the intellect of such things is potentiality without matter. But with intellect the intelligible* will be present."

CHAPTER VI.

Since all things must have the matter capable of becoming all things of its genus, and also the cause and effective, producing all such things [as are in relation to matter] these differences must also exist in the soul. The one is the intellect which becomes all things, but the other the intellect which produces all things.

For example: light causes colours in potency to become colours in actuality. This intellect is separate, unmingled, and impassive, since it is in its essence energy; for the efficient is more honourable than the patient; and the principle than matter. Science in energy (actuality) is the same as the thing [scientifically known], but science in potency is prior in time, in the one [to science in energy];

^{*} By intelligibles here Aristotle signifies separate essences or ideas themselves, i. e., beings truly and essentially intelligible. Hence Aristotle signifies that our intellect is immaterial and separate, since it is essentially intelligible in the same manner as beings truly intelligible." [Taylor's Note.

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though, in short, neither [is potency prior to energy] in time. It does not, however, perceive intellectually at one time and at another time not, but separate intellect is alone this very thing which it is,* and this alone is immortal and eternal. We do not, however, remember, because this [intellect] is impassive; but the passive intellect is corruptible, and, without this separate intellect, understands nothing.

CHAPTER VII.

"The intellect knows evil or blackness in a certain respect, 'by the contrary.'"

CHAPTER VIII.

"When intellect affirms or denies evil or good, it avoids or pursues: hence the soul never perceives intellectually without a phantasm. Sometimes the intellective power, looking as it were on the phantasms or conceptions which are in the soul, reasons and consults about future events looking to such things as are present; and when it has asserted, in the phantasm, that a thing is pleasant or painful, so here it avoids or pursues, and in short, is in action. The true and the false also which are without action are in the same genus with good and evil."

"If the intellect should understand anything in energy so far as it has a cavity, [for instance,] it will understand it without the flesh in which the cavity subsists. Thus it understands mathematical forms which are not separate [from things formed] as separate, when it understands them. In short, intellect which understands in energy is the things themselves [which it understands]."

"Though the external senses are many, yet the ultimate sense in which all the sensible energies are terminated is one, but is manifold in its essence. By this ultimate and common sense, the soul distinguishes the differences of the sensible objects pertaining to the different senses."

"As, therefore, there is one sense which forms a judgment of all sensible objects, so there is one practical intellect which forms a judgment of all phantasms or objects of imagination."

"As therefore the common sense contemplates and judges of the sensibles which are known by the particular senses, so the practical intellect contemplates the forms of things represented by phantasms and known by the energies of imagination; and as the common sense when distinguishing sensible objects is excited to avoid or pursue, so the practical intellect considering the objects of imagination, even when sensibles are not present, and discursively concluding that this is to be avoided and that is to be pursued, is moved to avoidance or pursuit."

^{*} Compare Swedenborg's "ipsum esse."

CHAPTER IX.

"A stone is not in the soul, but the form of the stone. The soul is, as it were, a hand; the hand is the organ of organs; intellect is the form of forms; and sense is the form of sensibles."

"When the intellect contemplates it must contemplate a certain phantasm; for phantasms are as sensible objects except that they are without matter. The phantasy differs from affirmative or negative, for the true or the false is the connection of mental conceptions."

CHAPTER XI.

THE GENESIS OF MOTION.

"There are three things: first, that which moves [sets in motion]; second, that by which it moves; third that which is moved.

"What moves [i. e., sets in motion] is two-fold:—the one [part] immovable; the other moving and moved.

"The immovable, indeed, is practical good. What moves and is moved is appetitive power (since what desires is moved so far as it desires, and appetite is a certain motion so far as it is an energy).

"That which is moved is the animal; and the organ by which appetite moves, this is now corporeal."

CHAPTER XII.

- "Animals have the sense of *touch* for the sake of *existence*; but all other senses for the sake of existing well."
 - "Without touch there can be no animal."
- "The touch perceives by touching objects themselves; all the other senses perceive by touching, but *through* other things as mediums."

B.

ON THE GENERATION OF ANIMALS.

"In the seed of all animals that is inherent which causes the seed to be prolific, viz.; that which is called heat. This, however, is not fire nor a power of such a kind as fire, but a spirit which is comprehended in the seed and in the foamy substance of it; and the nature which is in the spirit is analogous to the element of the stars. Hence fire germinates no animals,....but the heat of the sun and the heat of animals at the same time possess this vital heat."—(De Generatione Animalium, II.)

APPENDIX IV.

ERRATA IN THE TEXT OF THE LATIN EDITION, PROPOSED BY THE TRANSLATOR.

Page 113, line 6 from below, for nam (lectio dubia, Tafel) read non.

- " 121, " 18, for videmus read videmur.
- " 128, " 3, for quae read qui.
- " 157, " 10, for odimus restore the original adimus, changed by Tafel.
- " 160, " 2 from below, for recipiuntur read recipiunt.
- " 171, " 3 from below, for reposta read repostus.
- " 191, " 14 from below, for quae read qui.
- " 251, " 14 from below, for et consociari possunt read ut consociari possint.

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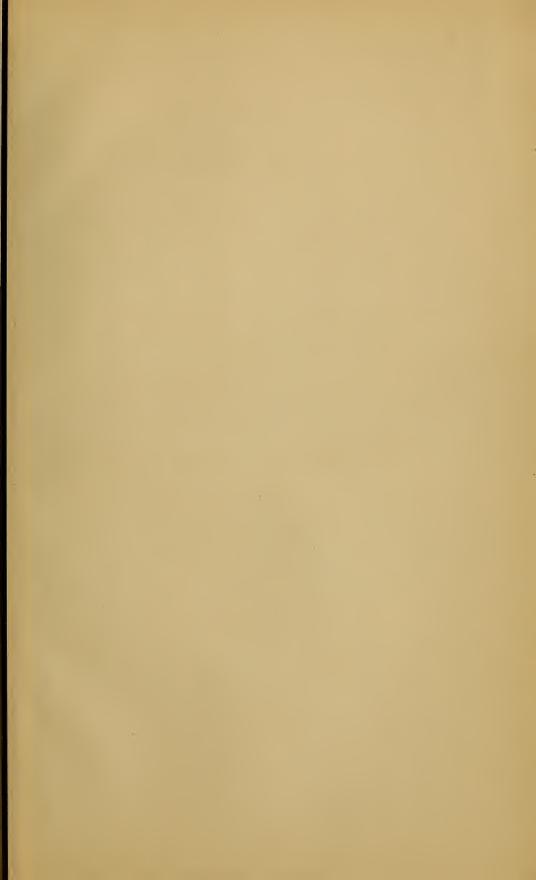
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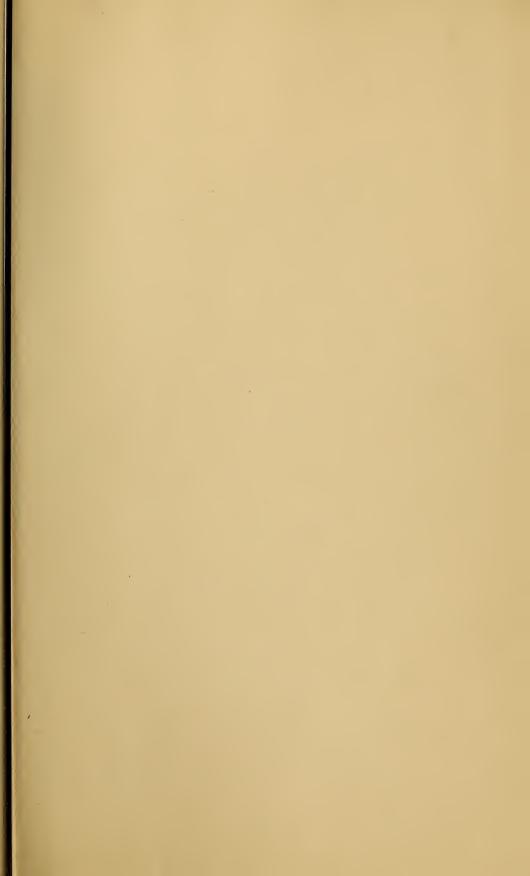
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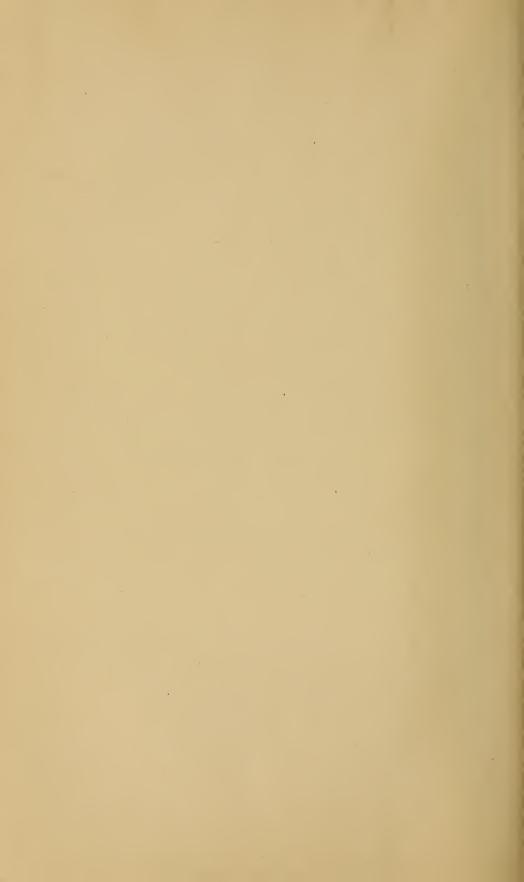
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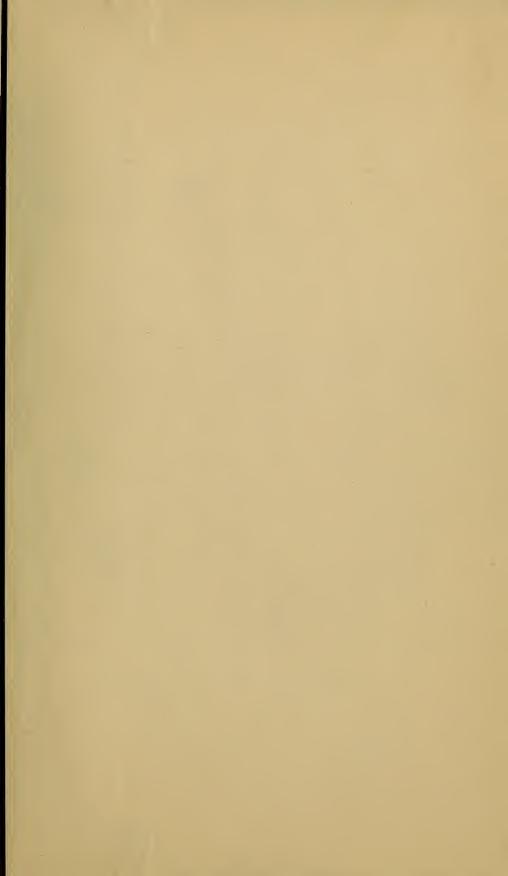
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